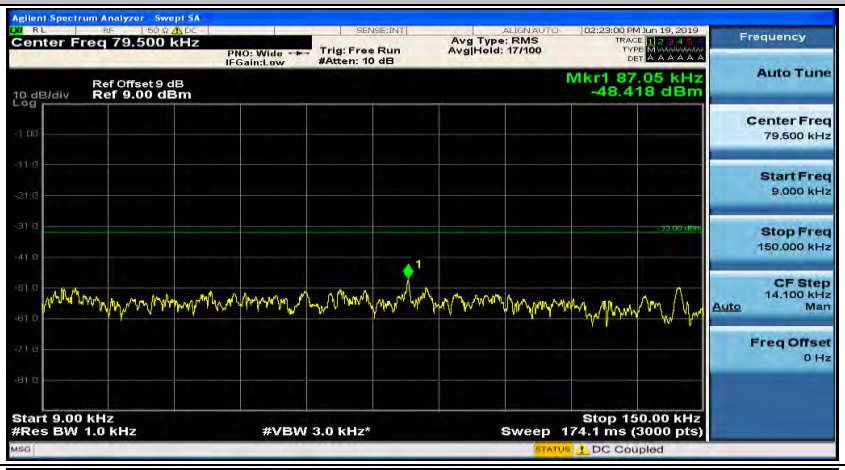
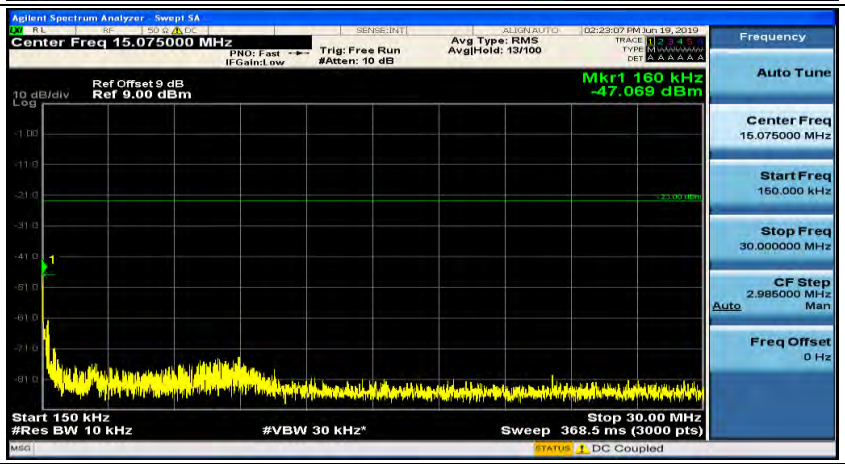
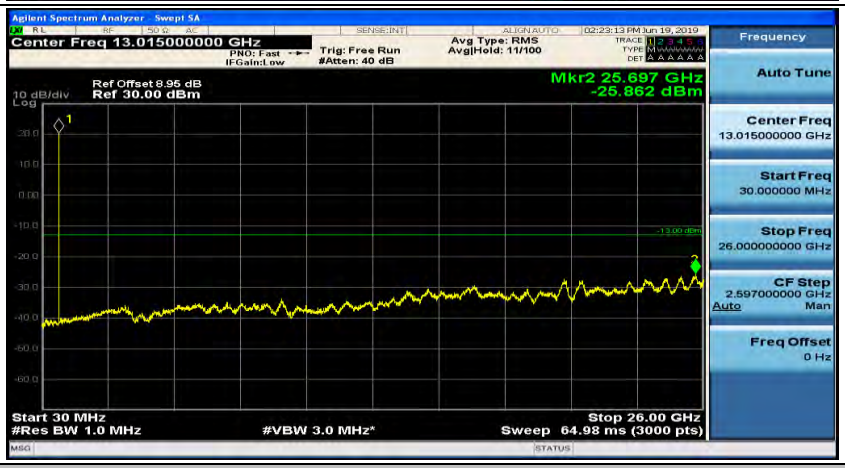
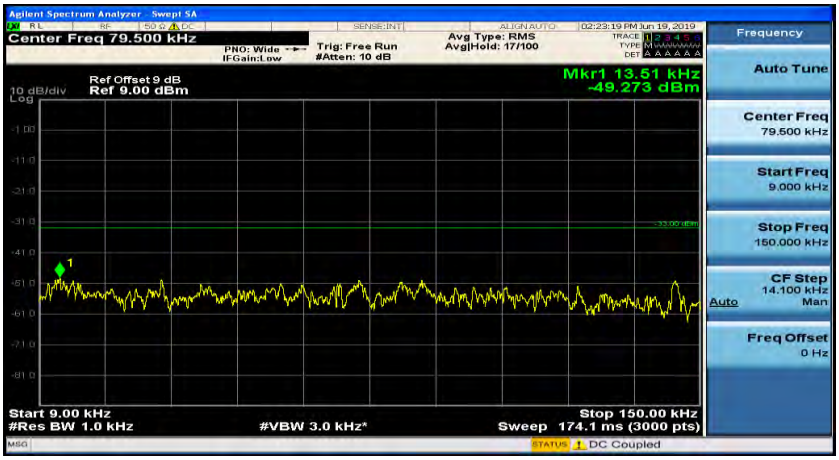
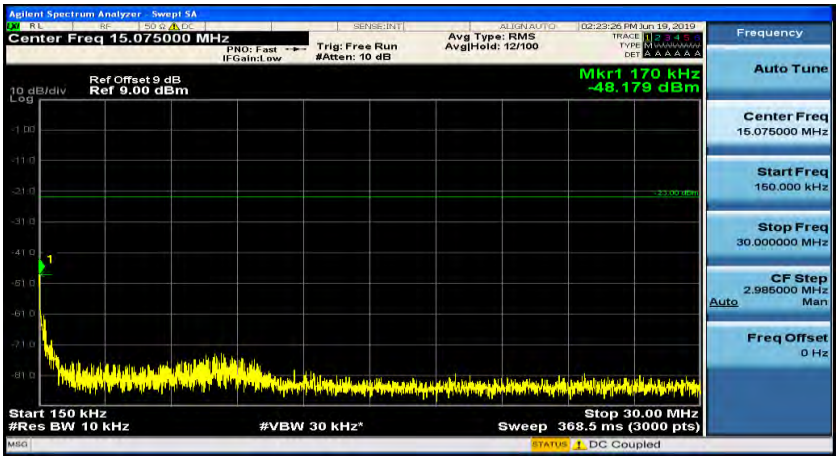
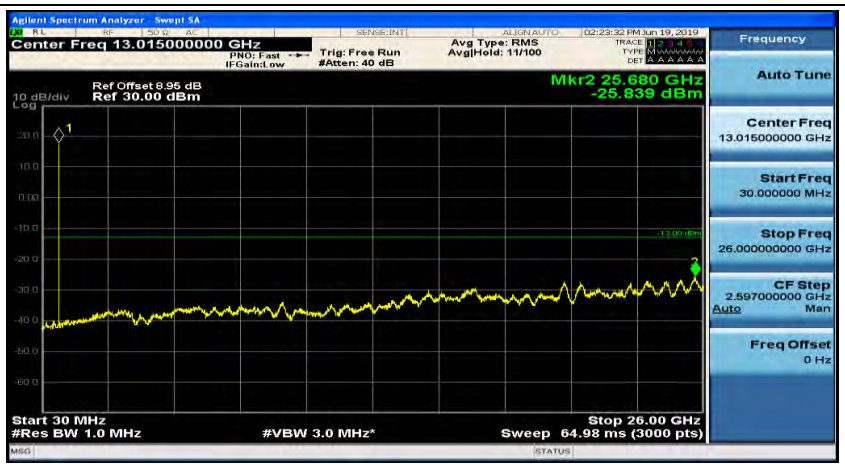
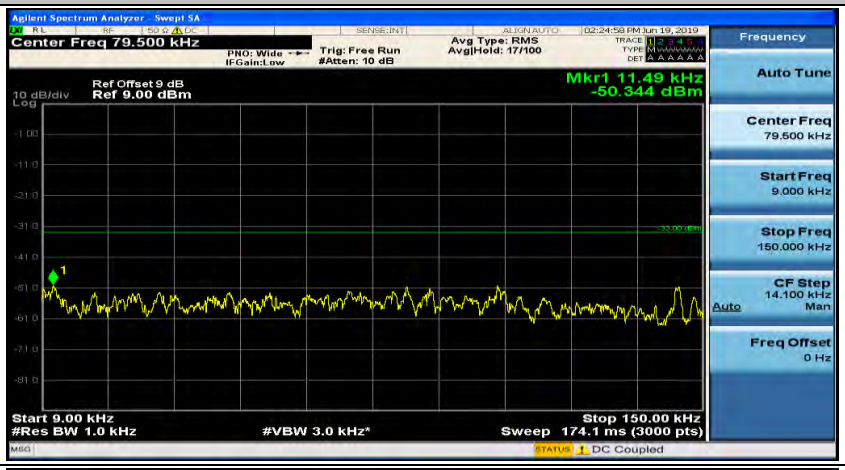
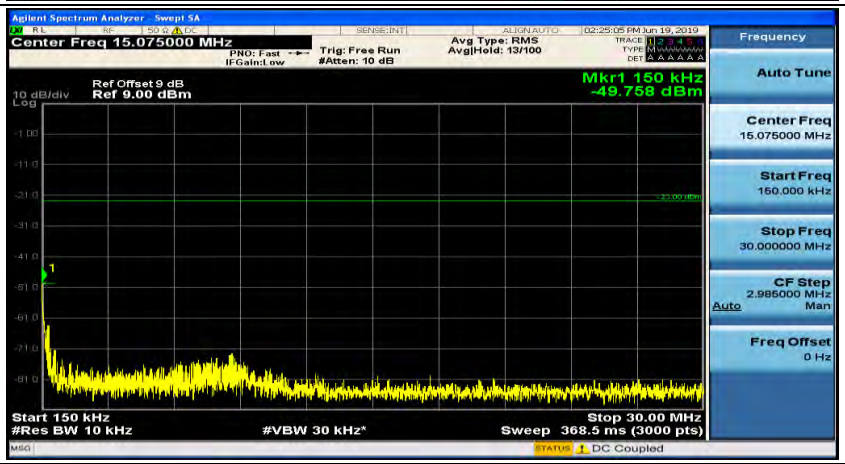
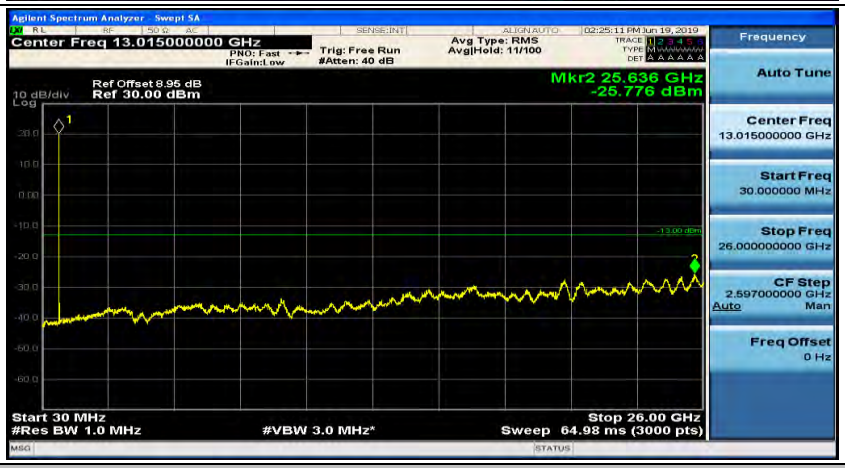
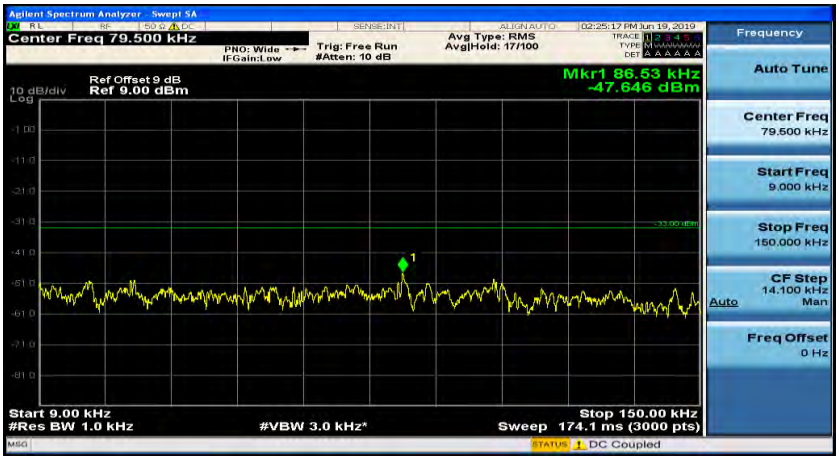
(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#0



(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#7

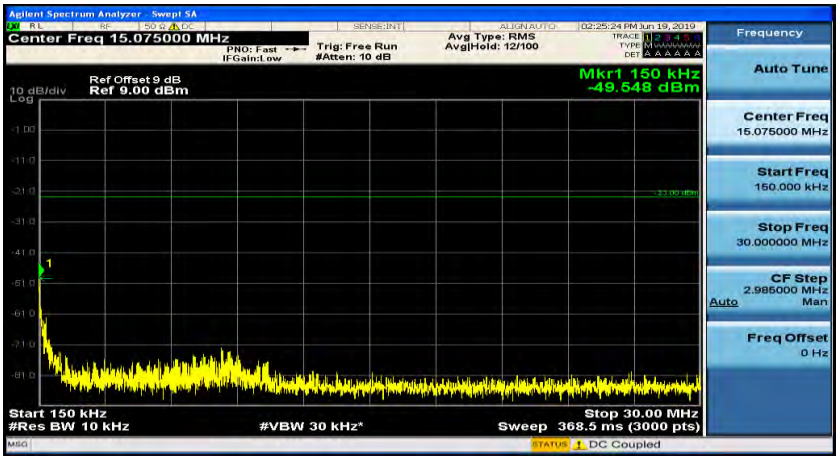

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:23:19 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 13.51 kHz
-49.273 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

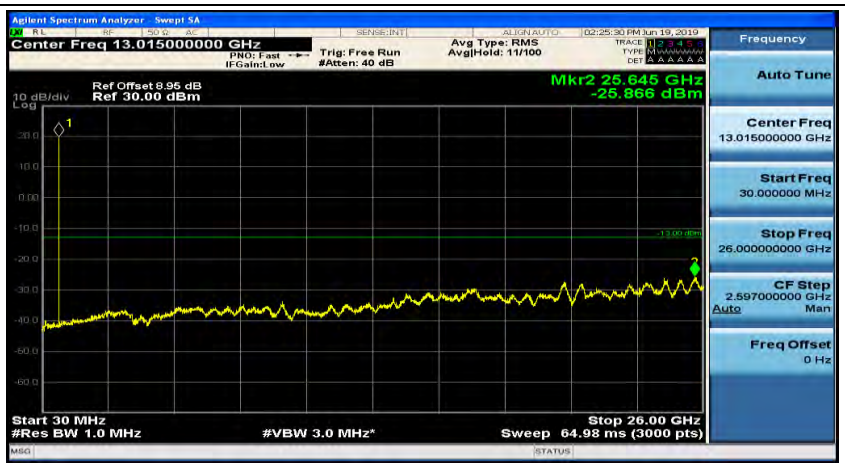

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:23:26 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 170 kHz
-48.179 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz

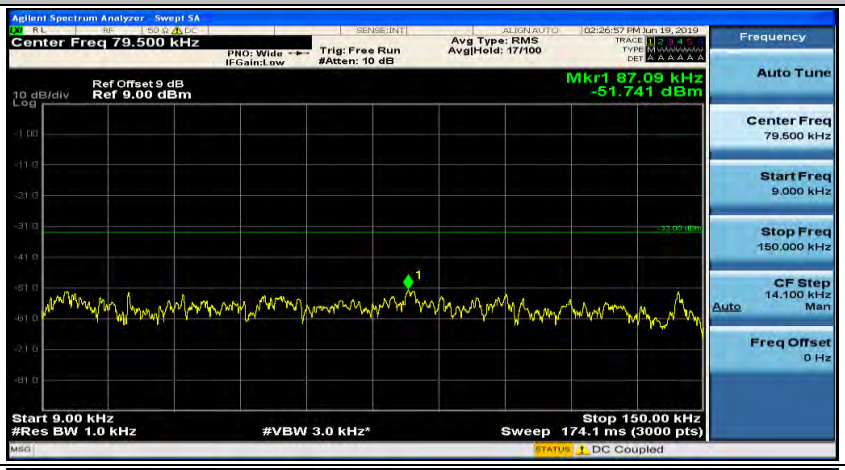
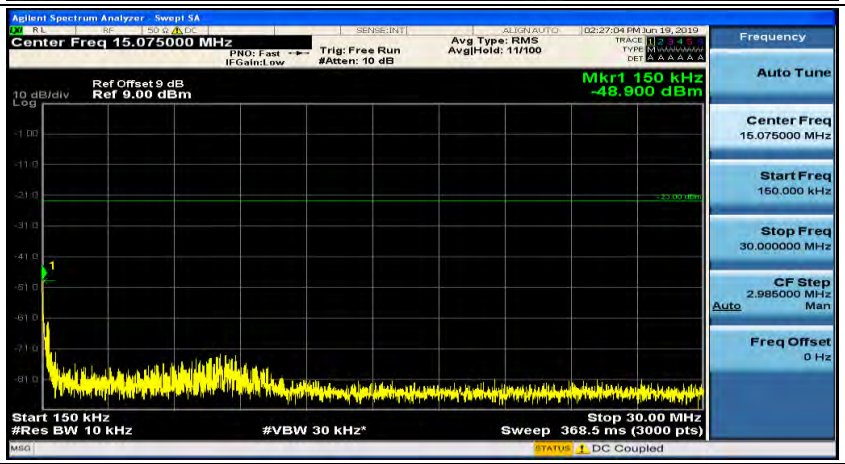
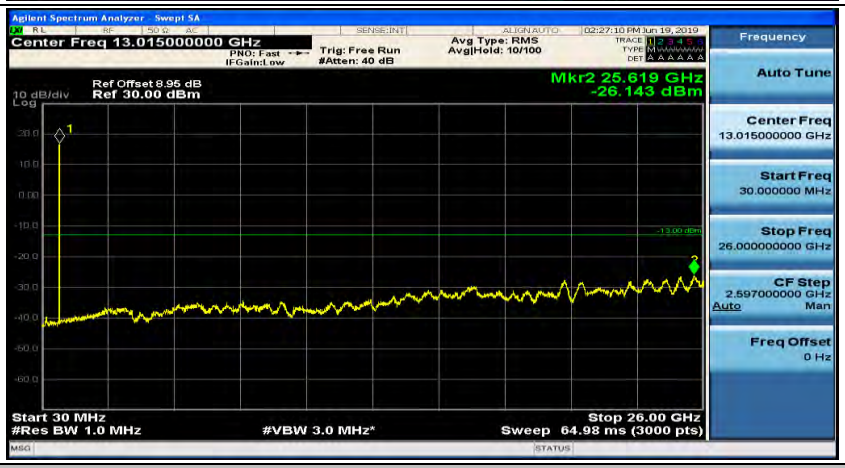

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:23:32 PM Jun 19, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.680 GHz
-25.839 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

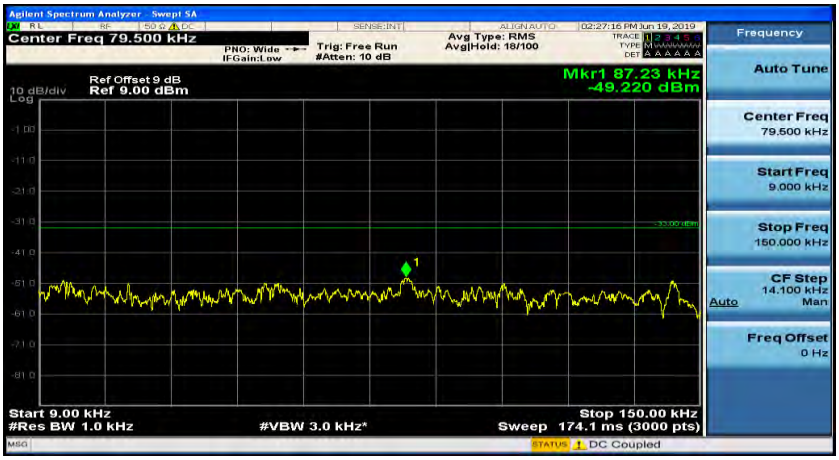
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7

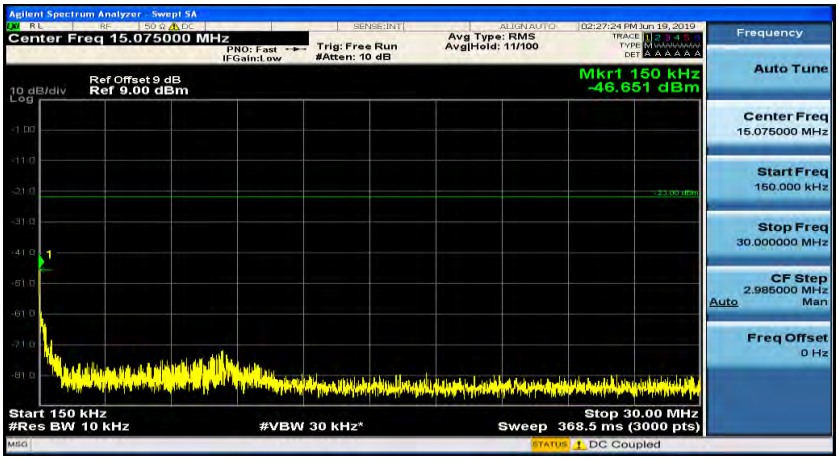

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:25:17 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 86.53 kHz
-47.646 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

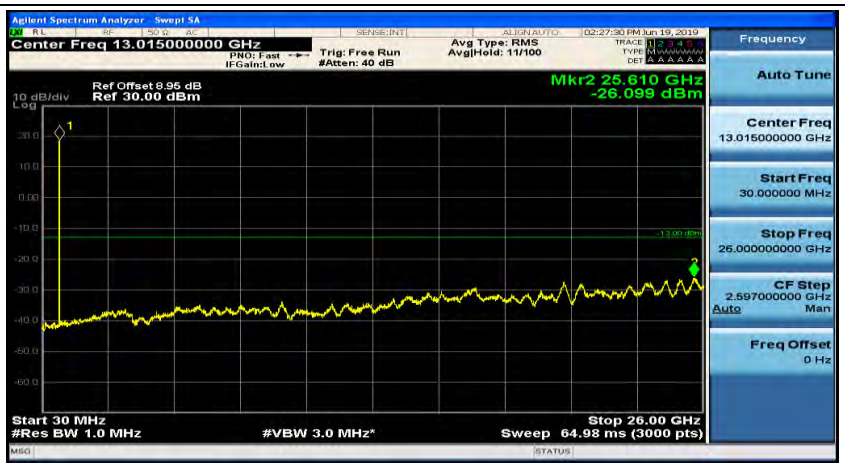

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:25:24 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-49.548 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:25:30 PM Jun 19, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.645 GHz
-25.866 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7

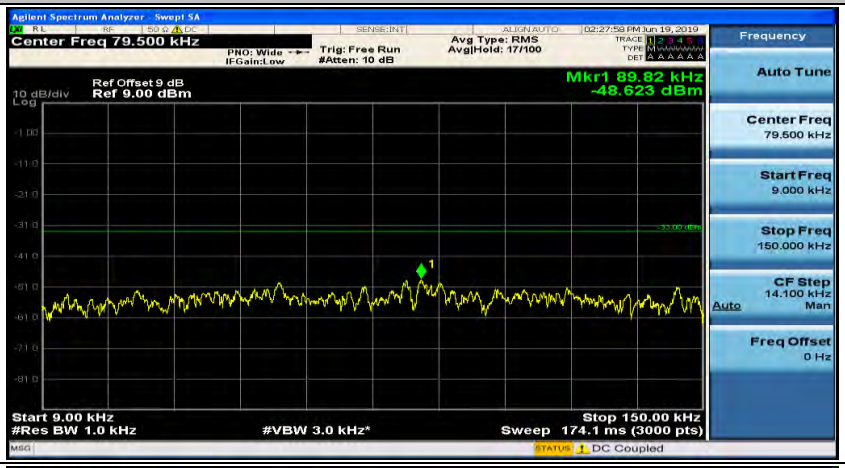

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 18/100
02:27:16 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 87.23 kHz
-49.220 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
1 DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

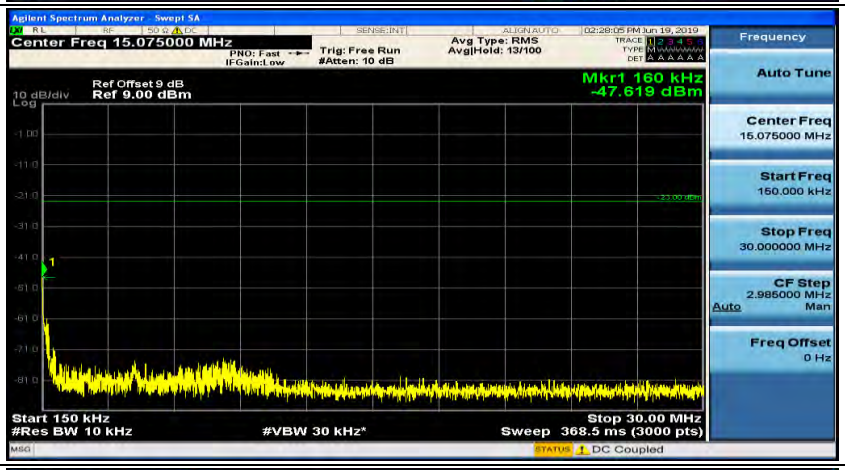

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
02:27:24 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-46.651 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
1 DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz

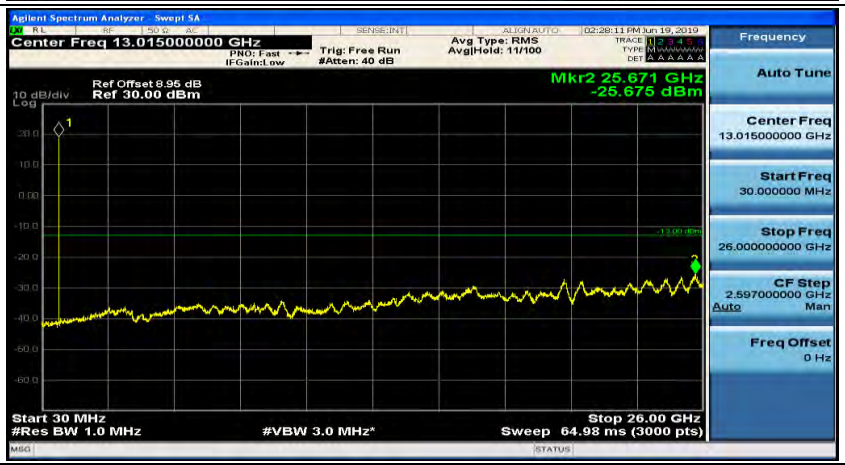

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:27:30 PM Jun 19, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.610 GHz
-26.099 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

Channel Bandwidth: 5 MHz

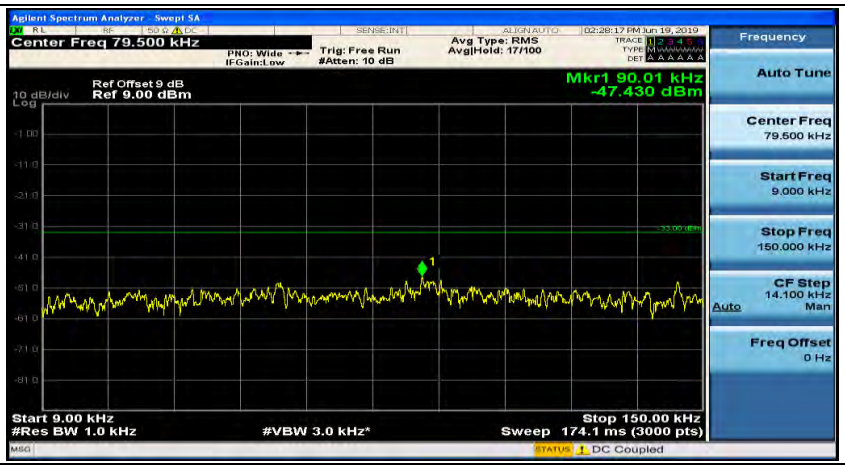
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0

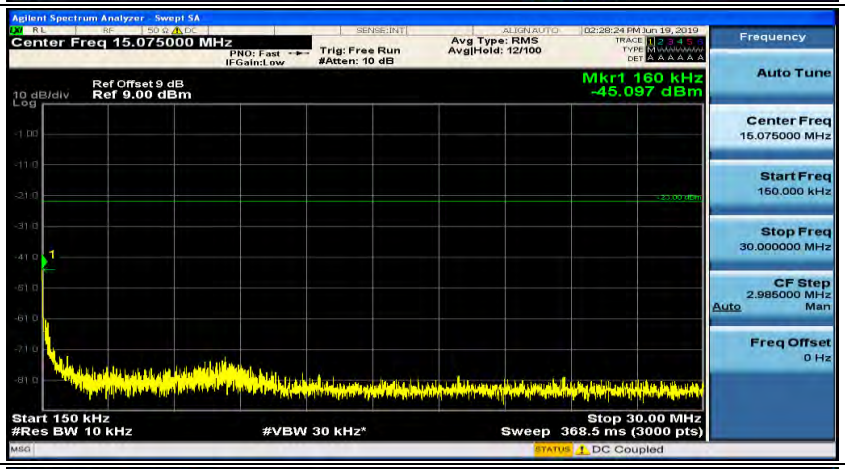




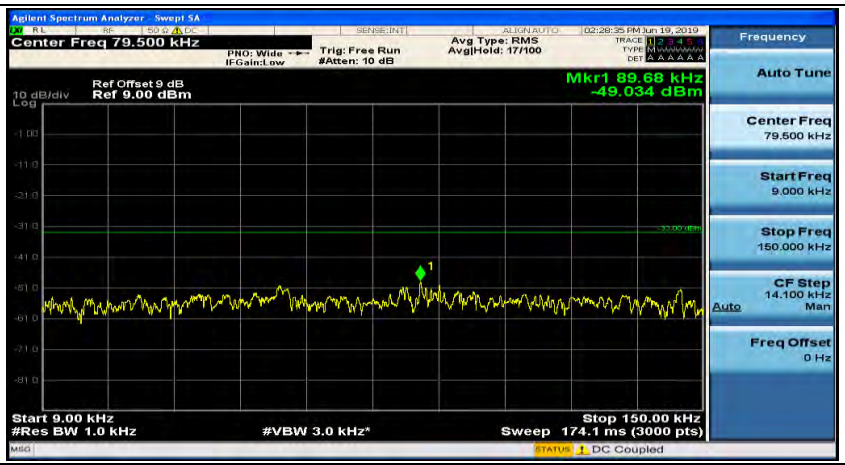


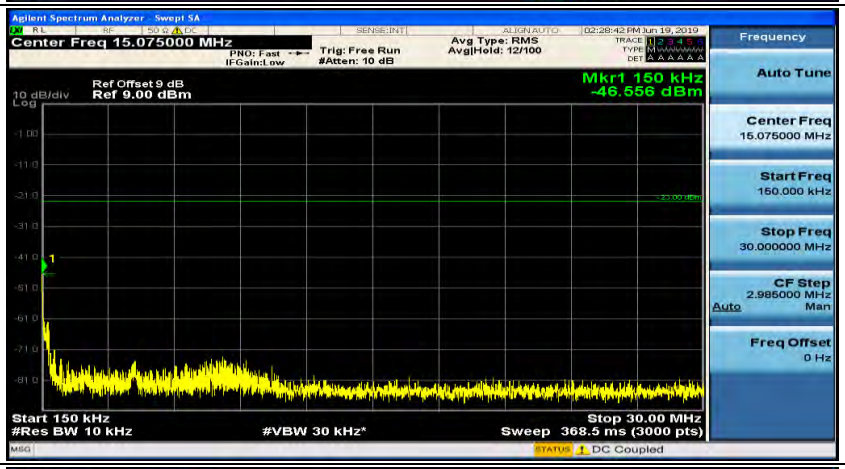
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12



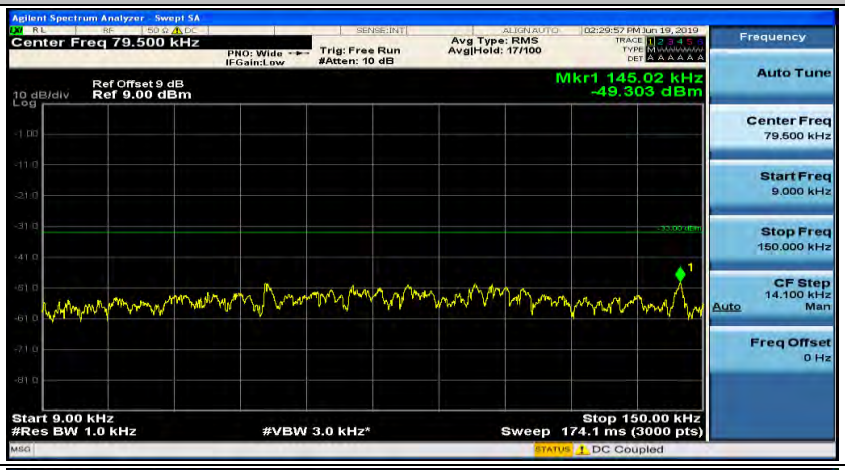
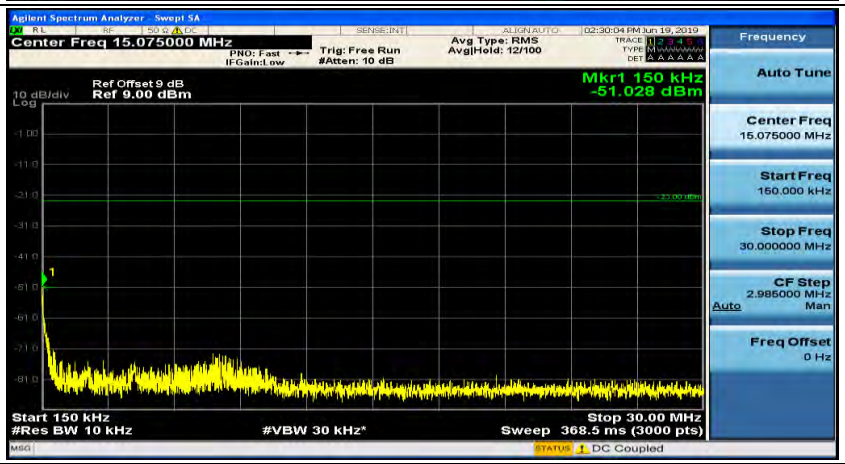
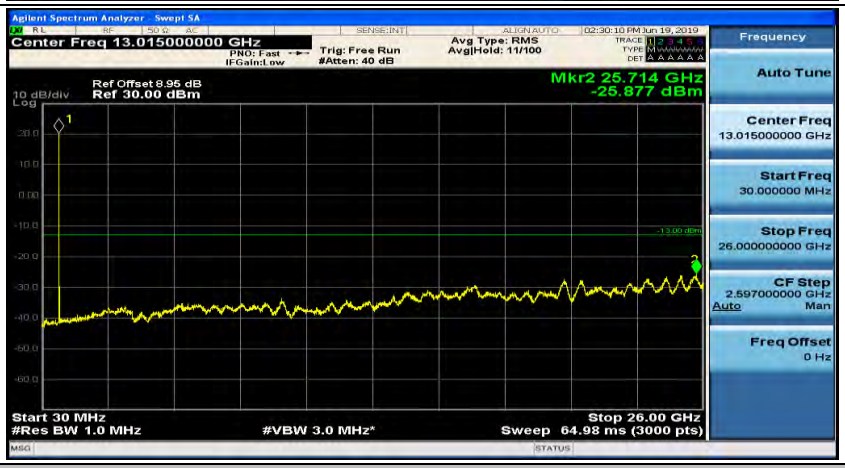


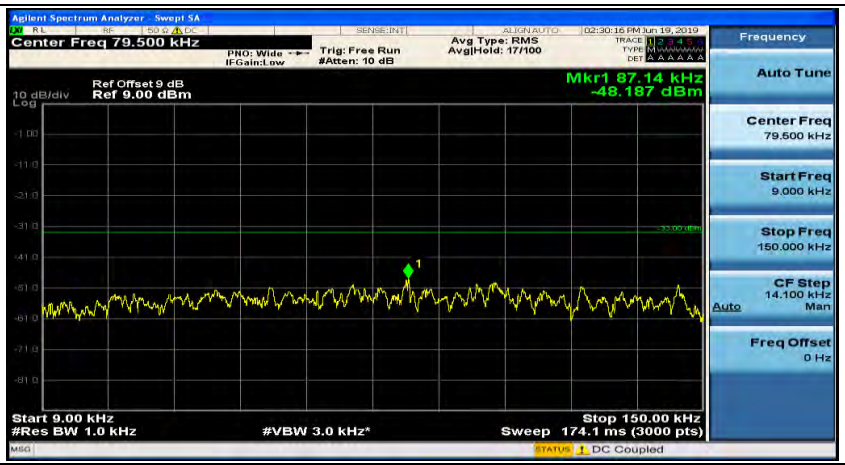
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

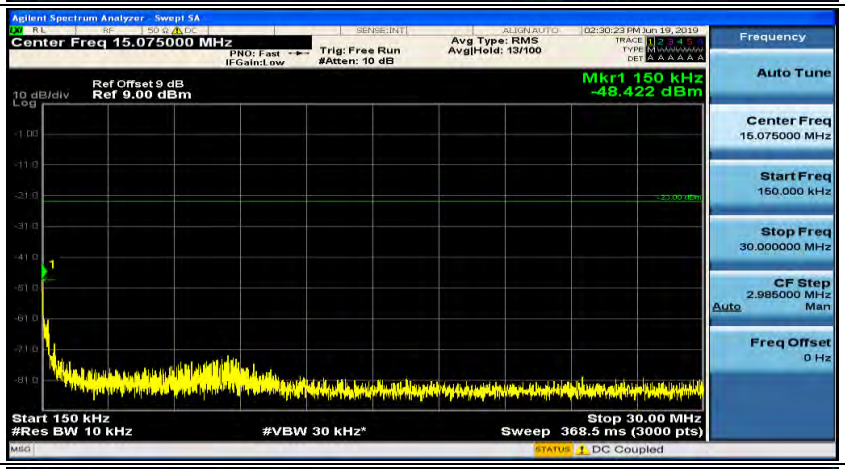

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:28:35 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 89.68 kHz
-49.034 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:28:42 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-46.556 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:28:48 PM Jun 19, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.636 GHz
-25.938 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

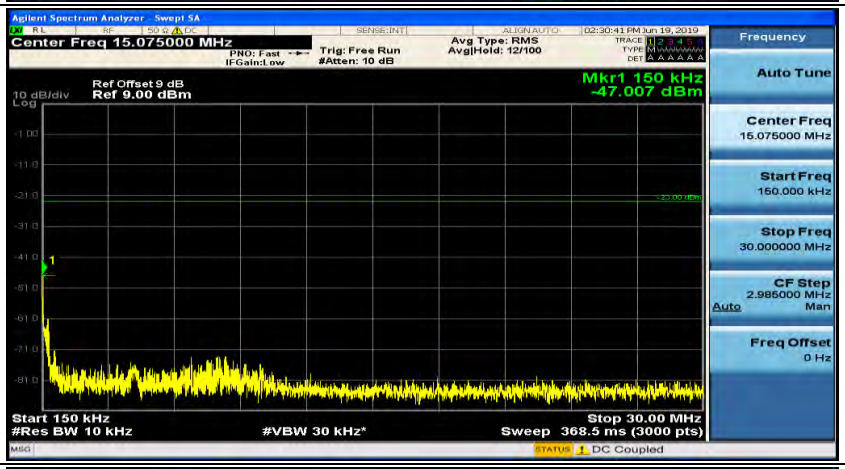
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12



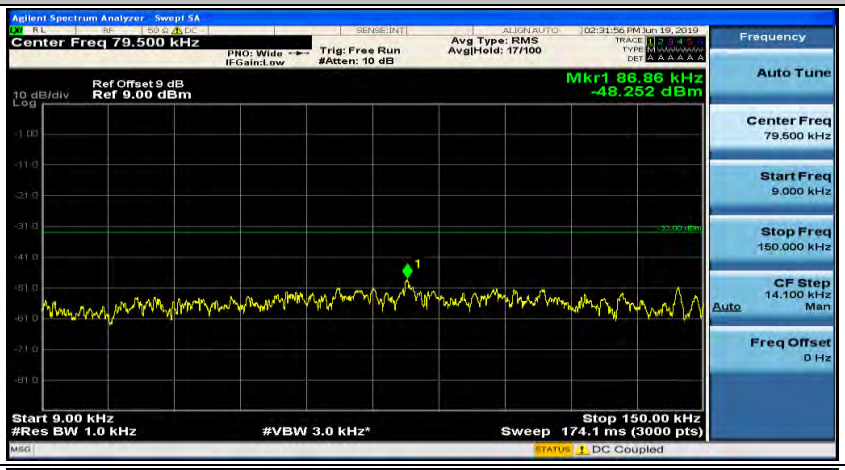
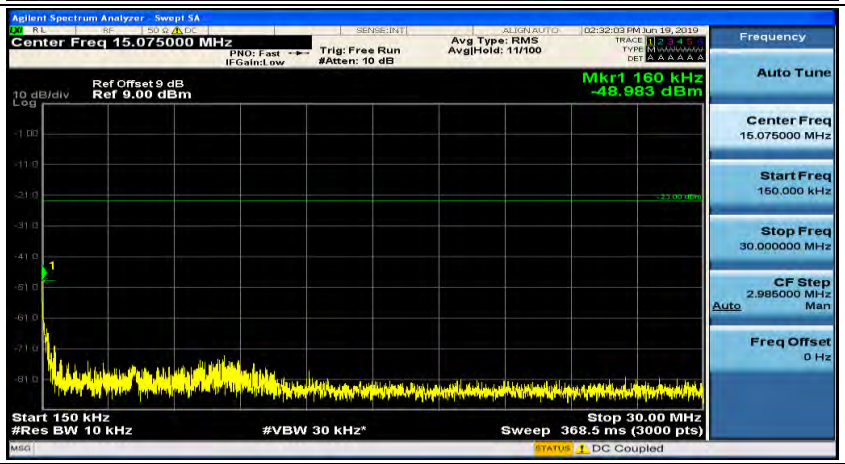


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

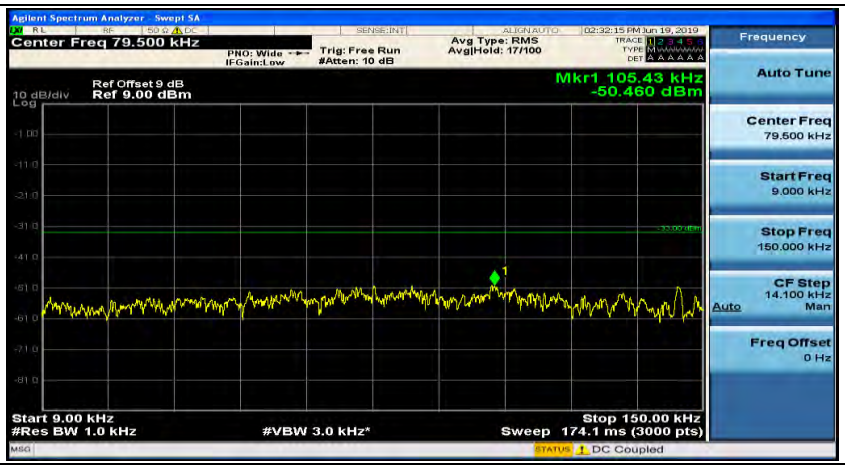

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:30:34 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 100.96 kHz
-49.682 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

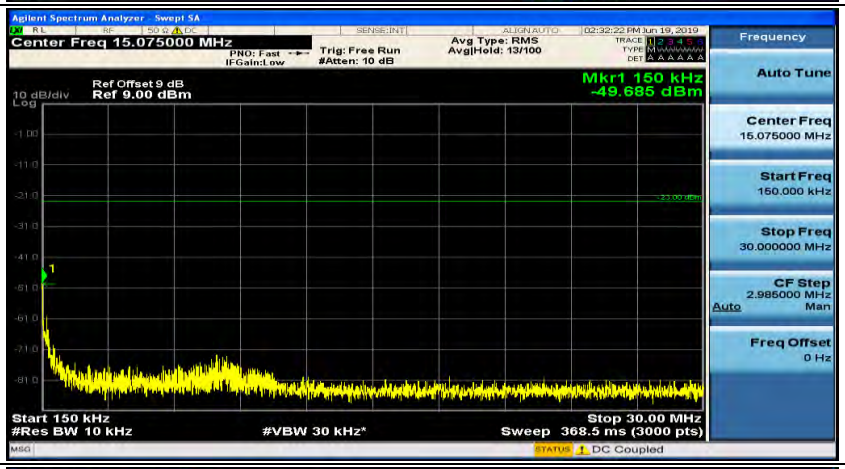

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:30:41 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-47.007 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:30:47 PM Jun 19, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.619 GHz
-26.369 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

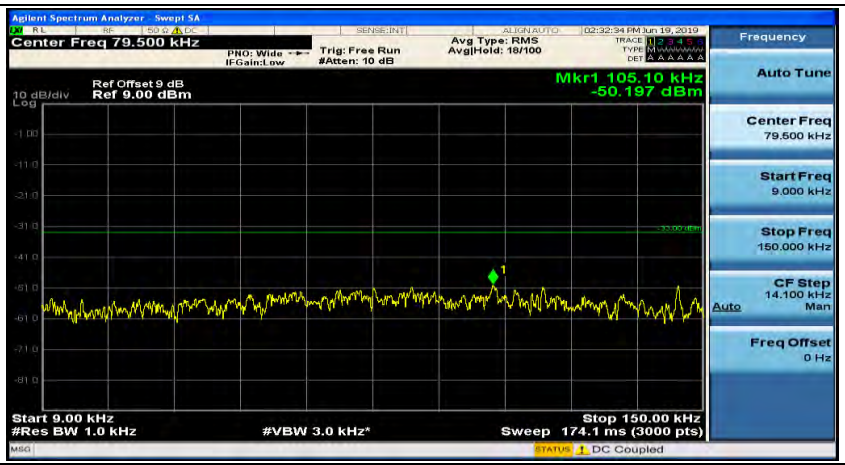
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0



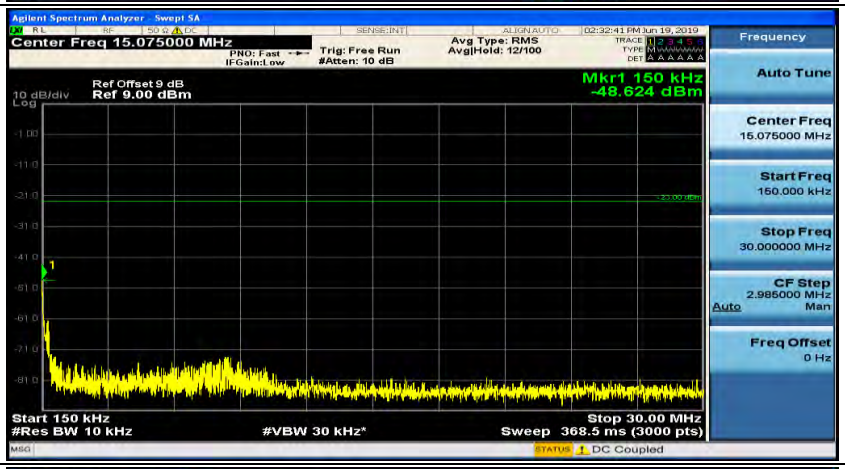
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12



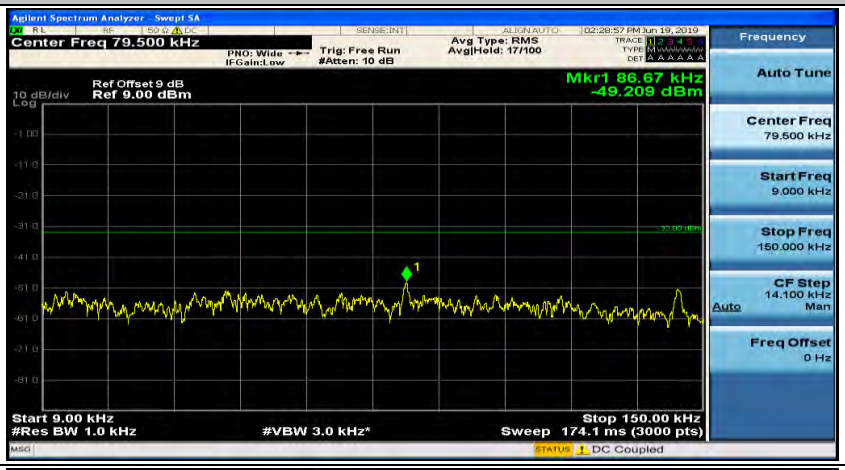
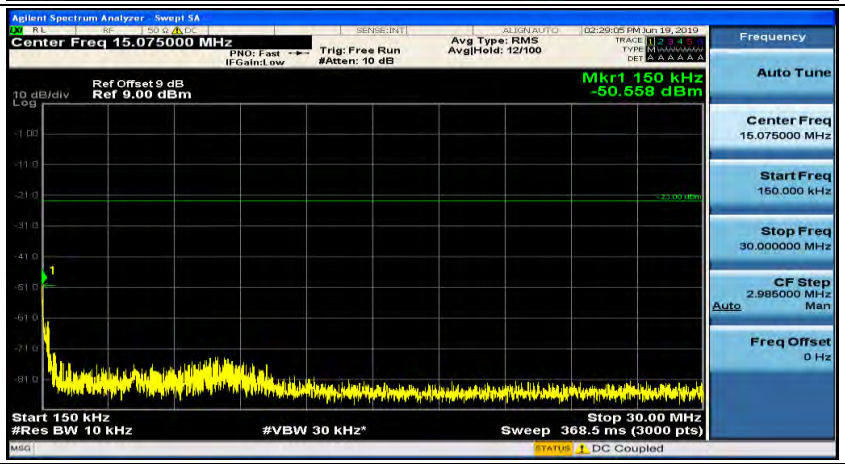


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24

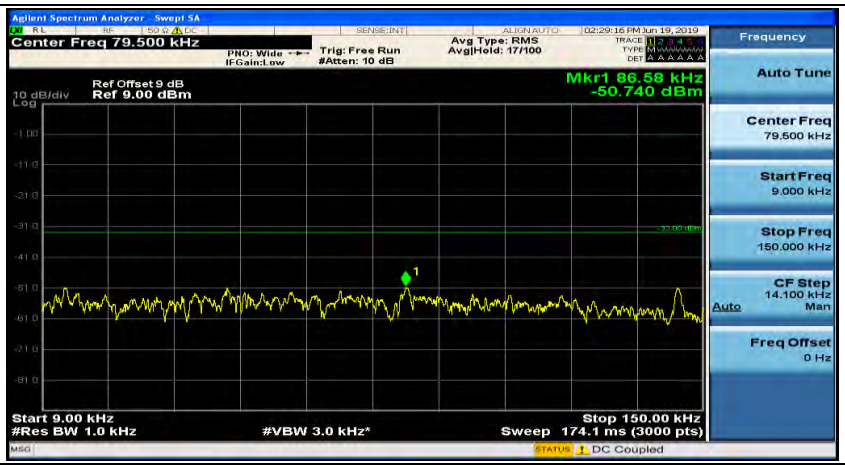

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 18/100
02:32:34 PM Jun 19, 2019
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 105.10 kHz
-50.197 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

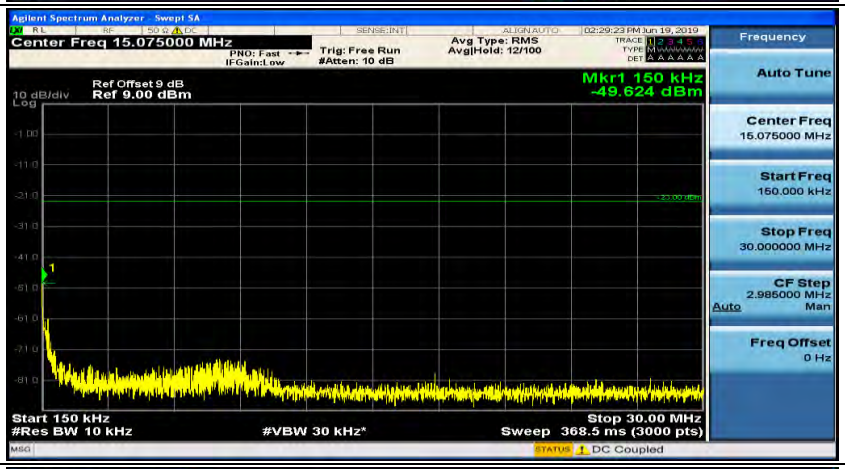

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:32:41 PM Jun 19, 2019
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-48.624 dBm
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:32:46 PM Jun 19, 2019
Frequency
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.619 GHz
-26.089 dBm
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

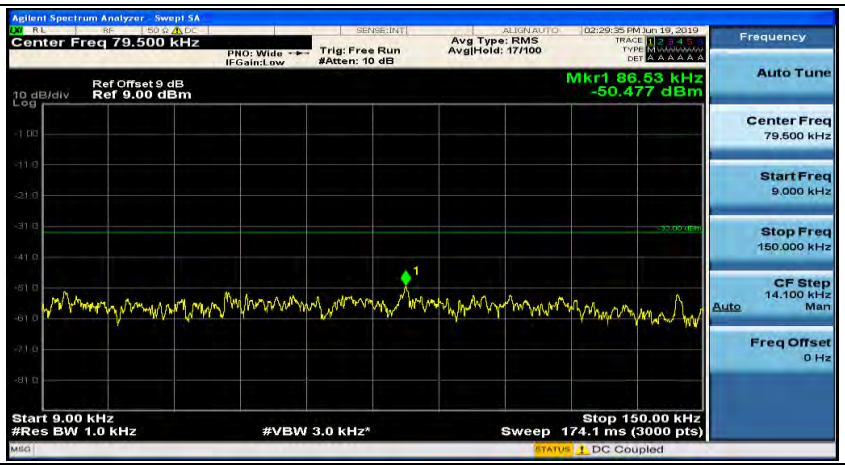
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



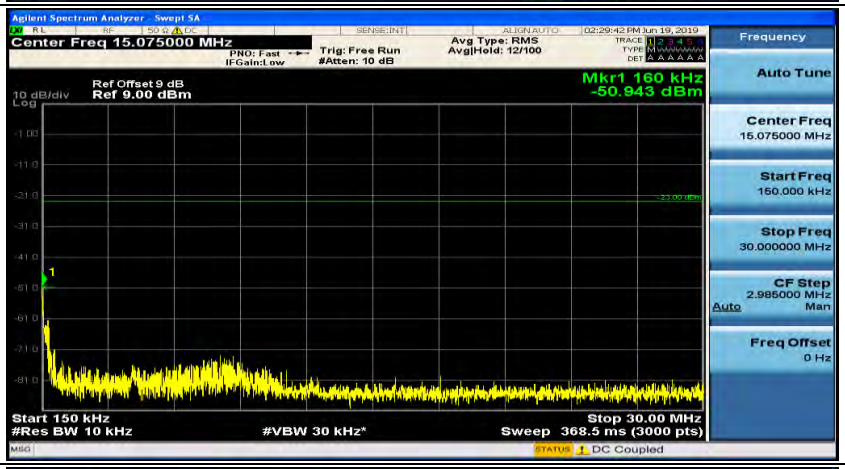
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12



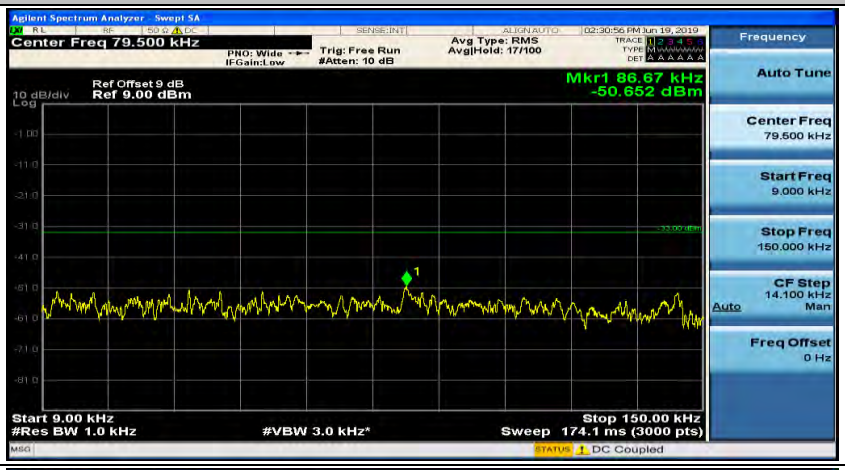
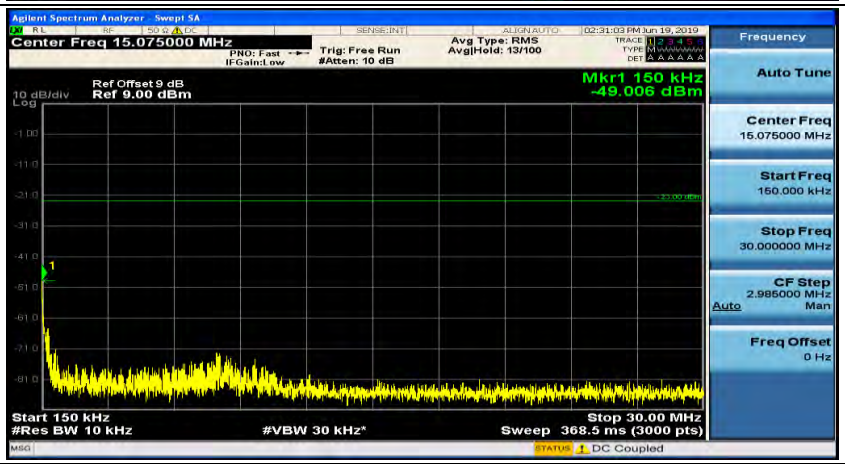


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

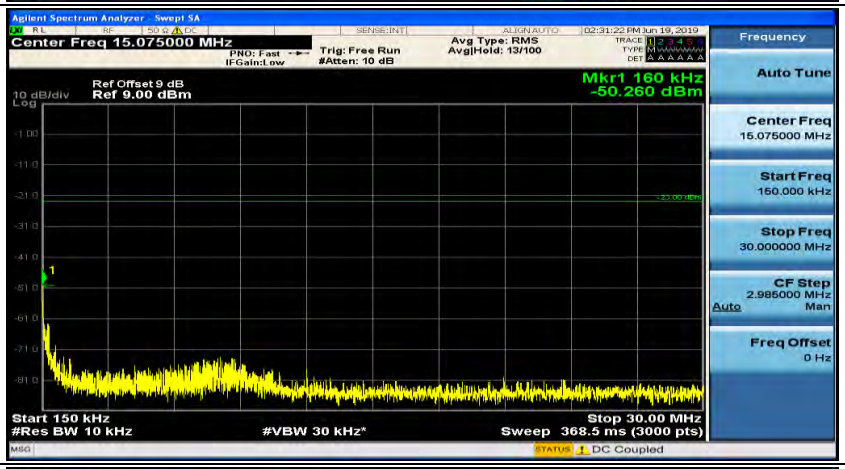

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:29:35 PM Jun 19, 2019
Frequency
Auto Tune
Mkr1 86.53 kHz
-50.477 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:29:42 PM Jun 19, 2019
Frequency
Auto Tune
Mkr1 160 kHz
-50.943 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled

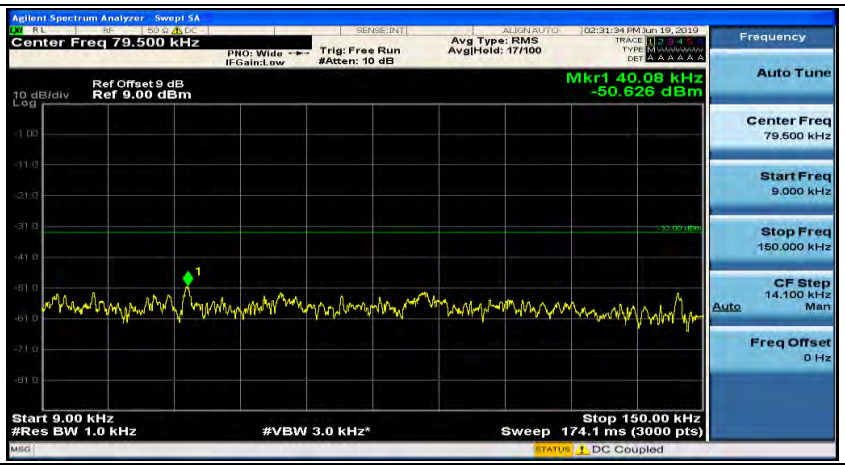

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:29:48 PM Jun 19, 2019
Frequency
Auto Tune
Mkr2 25.134 GHz
-26.640 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

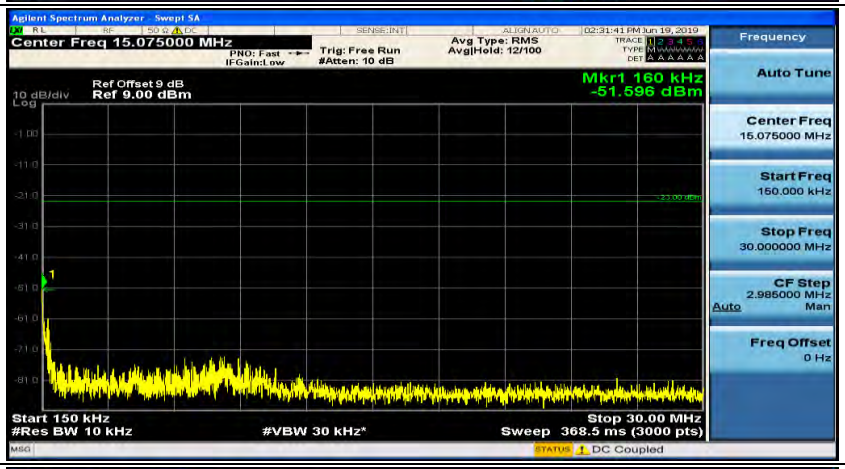
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

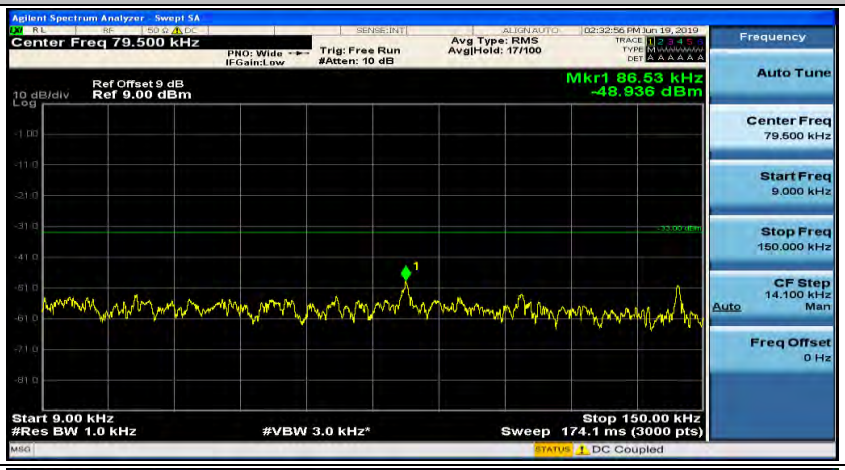
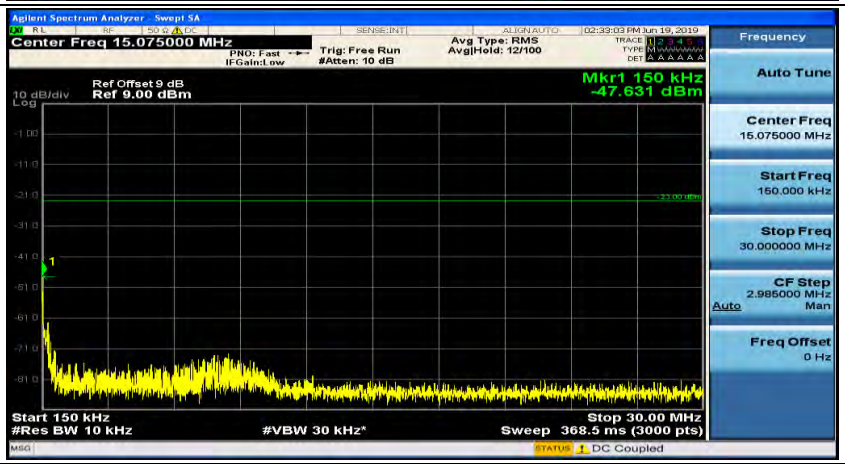


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

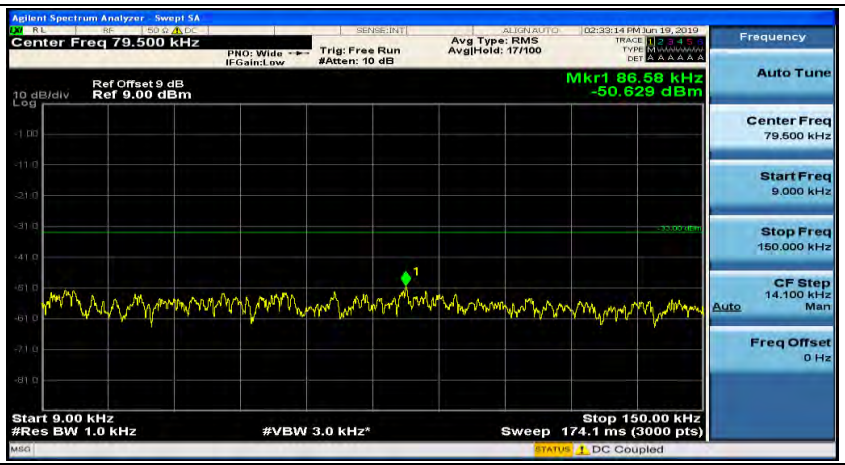

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:31:34 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 40.08 kHz
-50.626 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

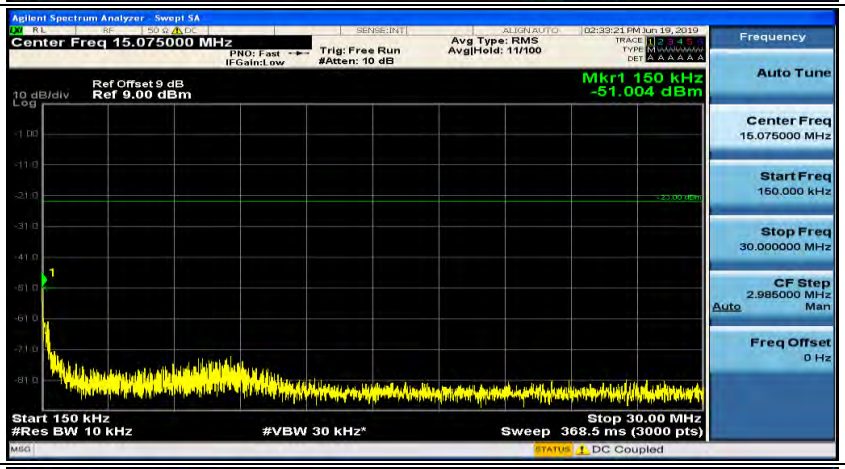

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:31:41 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 160 kHz
-51.596 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:31:47 PM Jun 19, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.706 GHz
-25.906 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

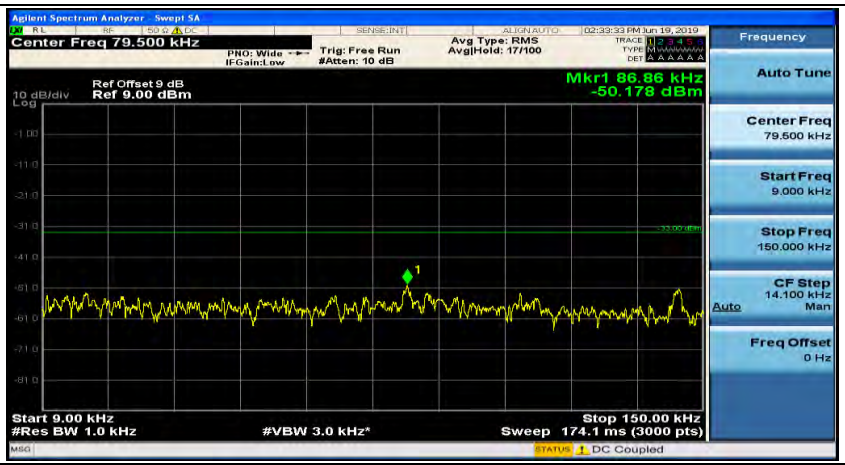
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0



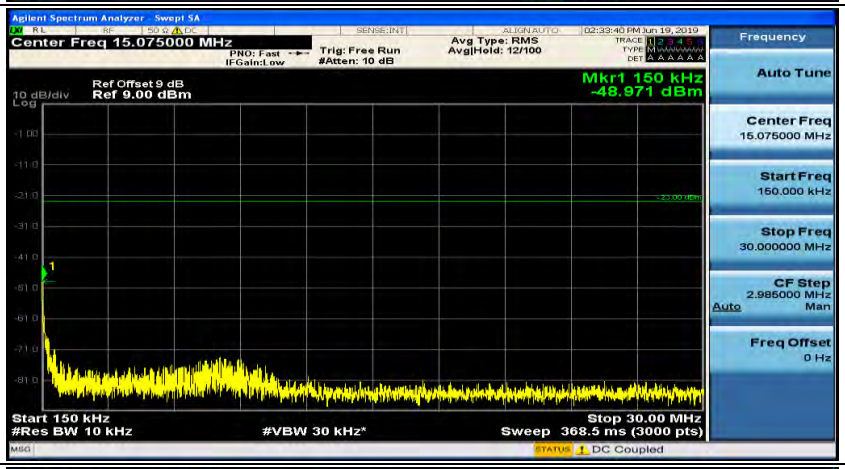
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12





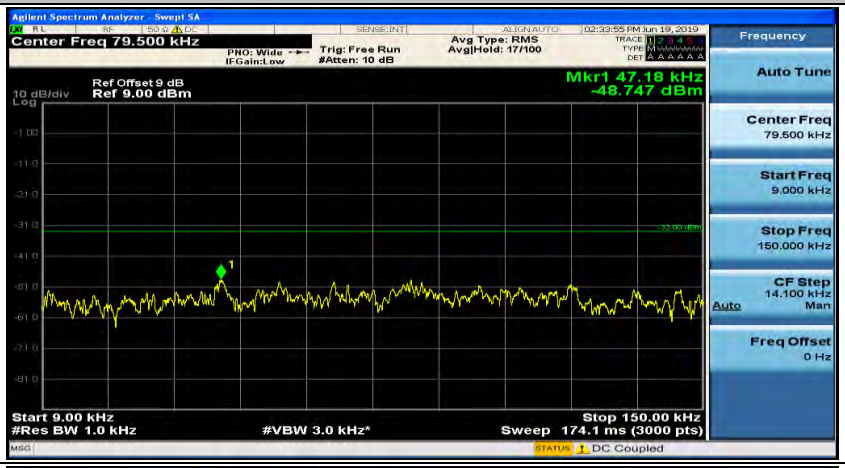
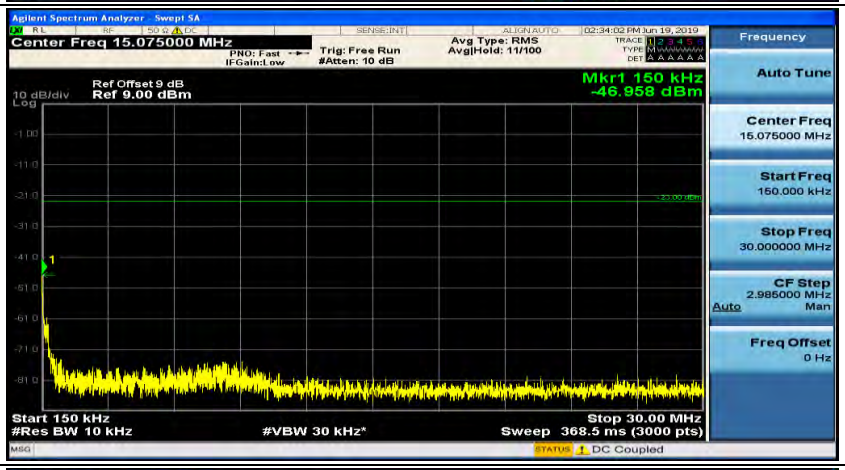
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24


Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:33:33 PM Jun 19, 2019
Frequency
Auto Tune
Mkr1 86.86 kHz
-50.178 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

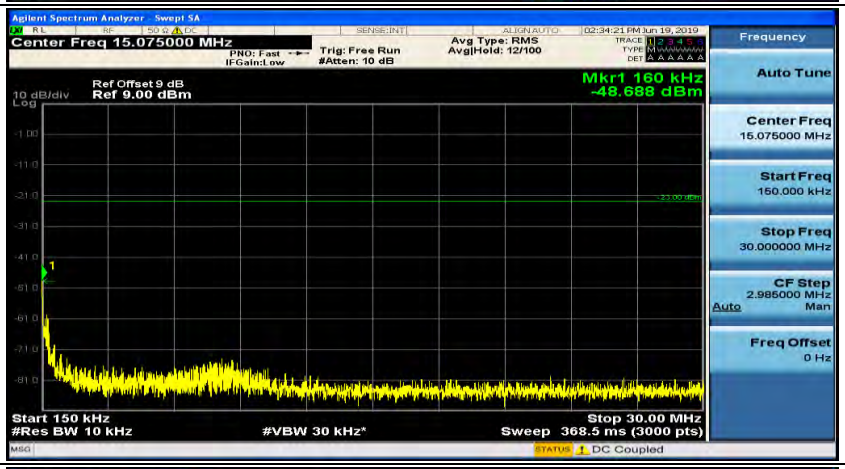

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:33:40 PM Jun 19, 2019
Frequency
Auto Tune
Mkr1 150 kHz
-48.971 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:33:46 PM Jun 19, 2019
Frequency
Auto Tune
Mkr2 25.706 GHz
-25.956 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

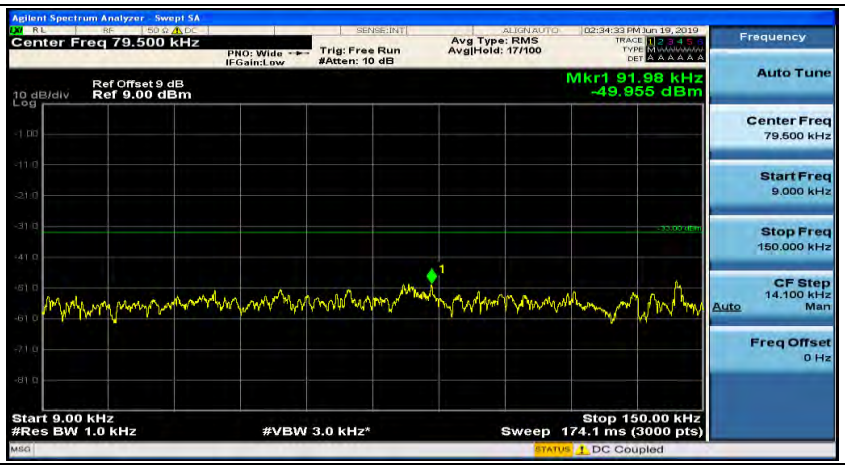
Channel Bandwidth: 10 MHz

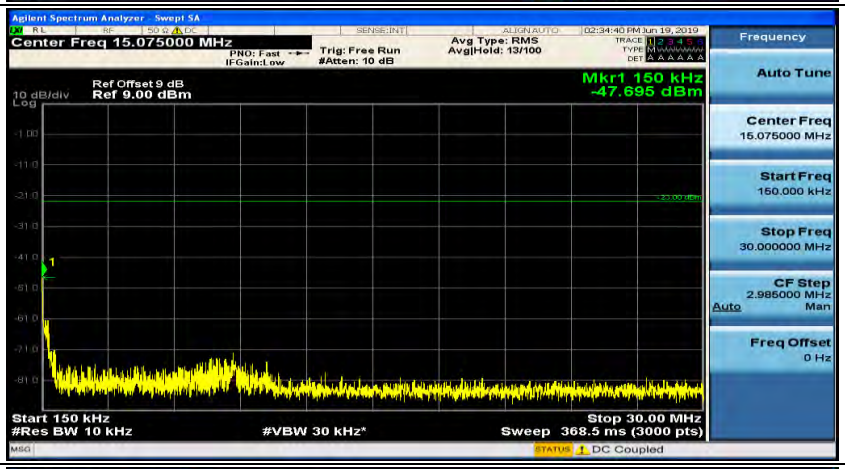
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#24

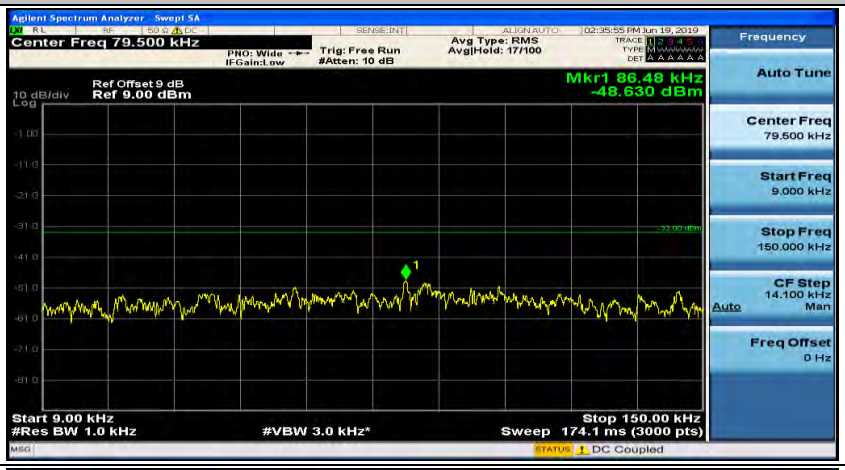
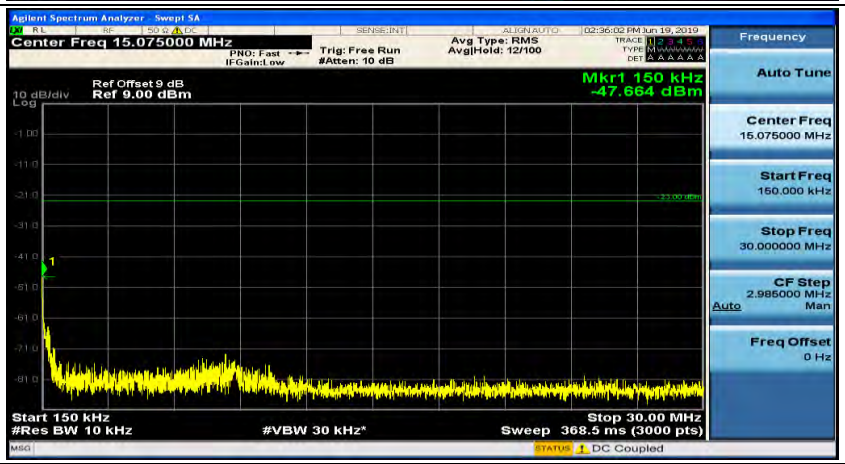


Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#49

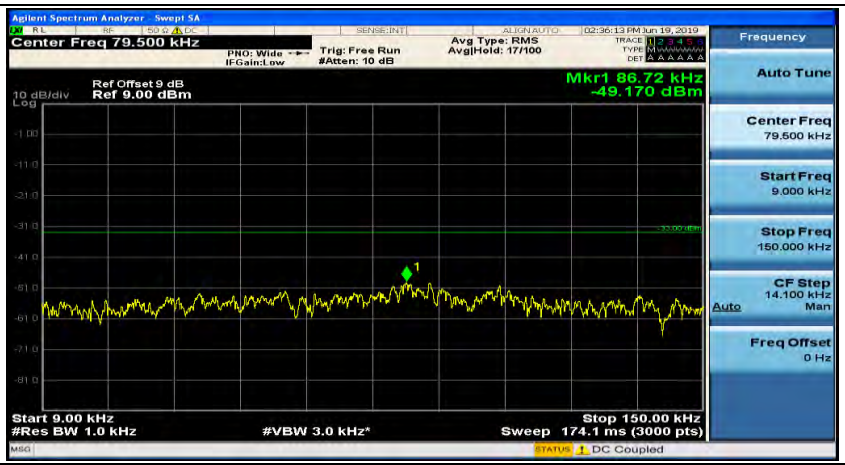

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:34:33 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 91.98 kHz
-49.955 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

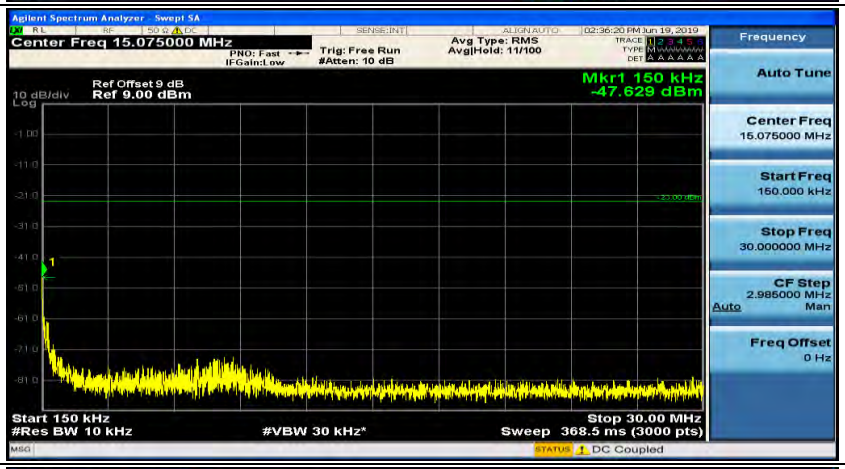

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 13/100
02:34:40 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-47.695 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 9/100
02:34:46 PM Jun 19, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.706 GHz
-26.231 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

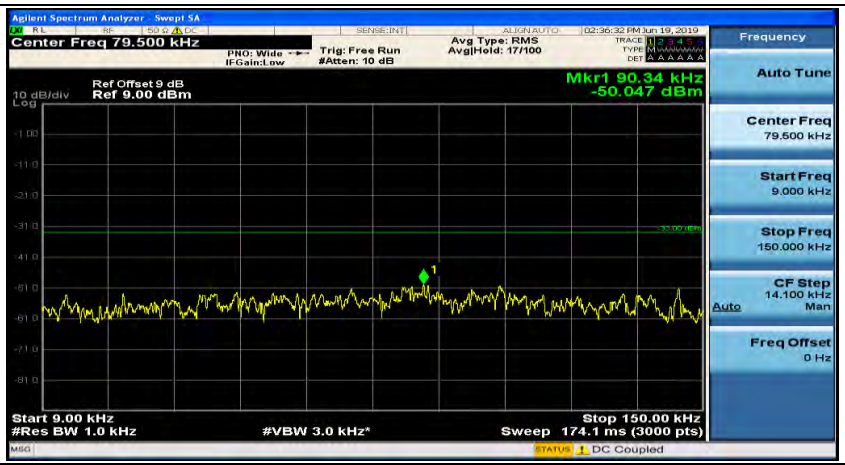
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0



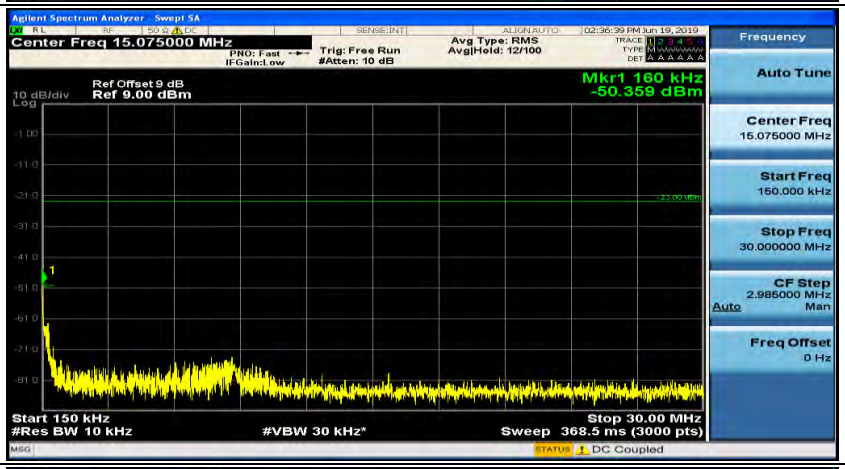
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24



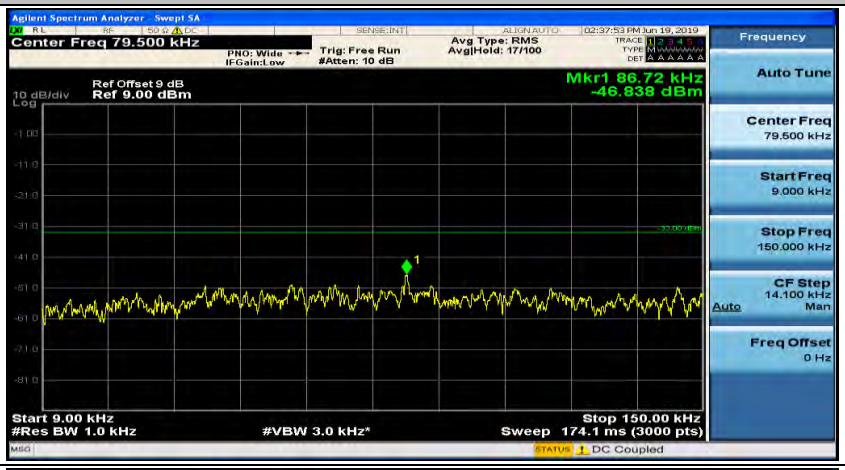
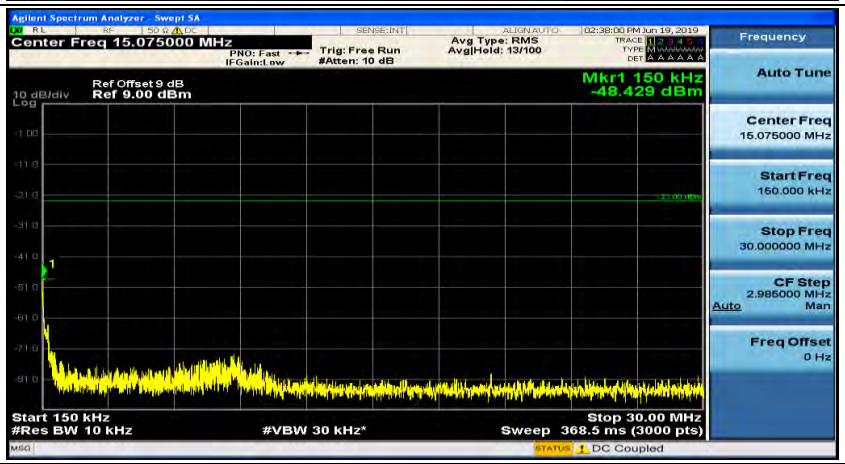


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

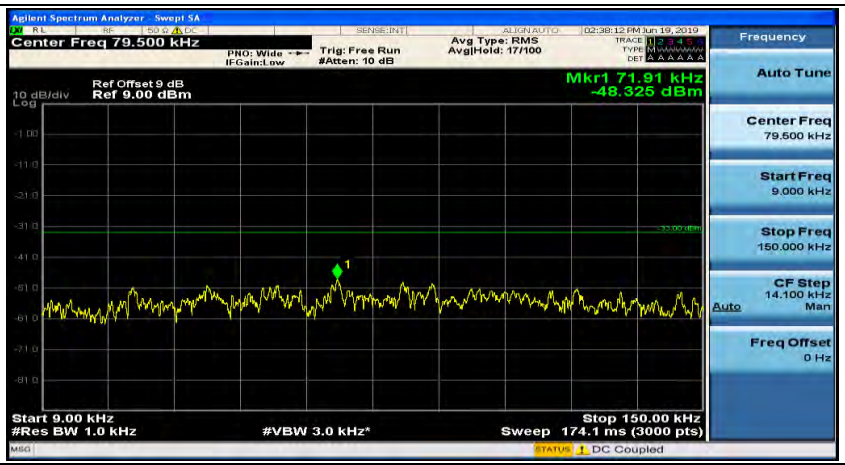

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:36:32 PM Jun 19, 2019
Frequency
Auto Tune
Mkr1 90.34 kHz
-50.047 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

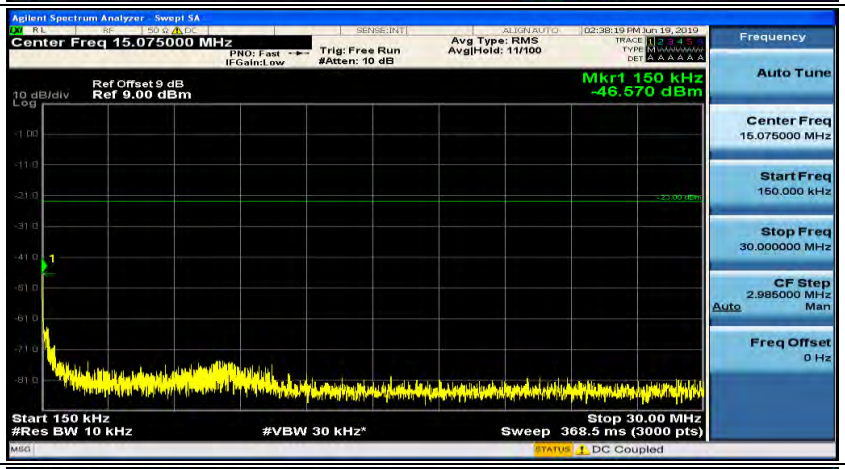

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:36:39 PM Jun 19, 2019
Frequency
Auto Tune
Mkr1 160 kHz
-50.359 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:36:45 PM Jun 19, 2019
Frequency
Auto Tune
Mkr2 25.628 GHz
-26.059 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

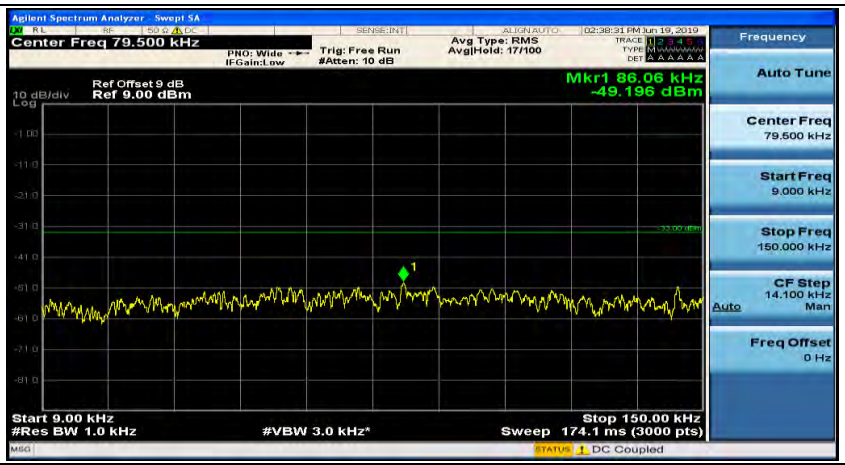
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0



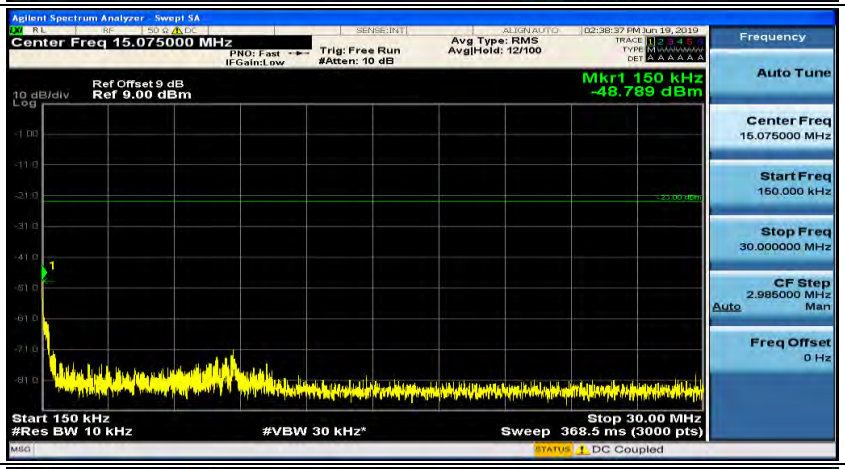
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24



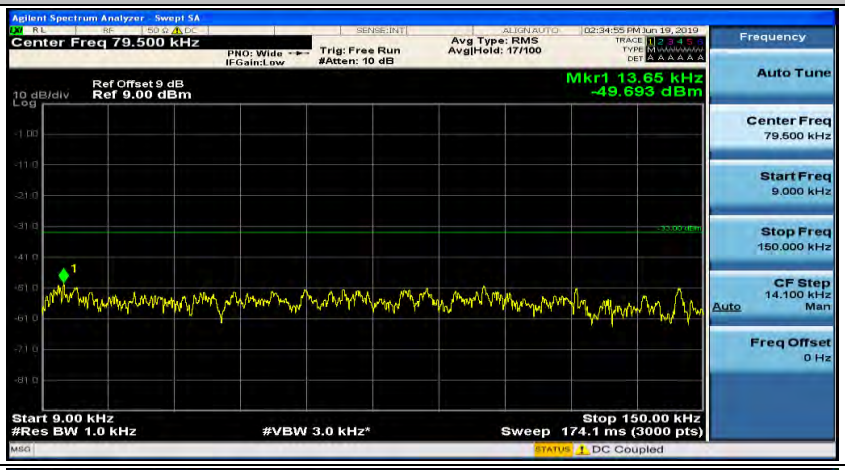
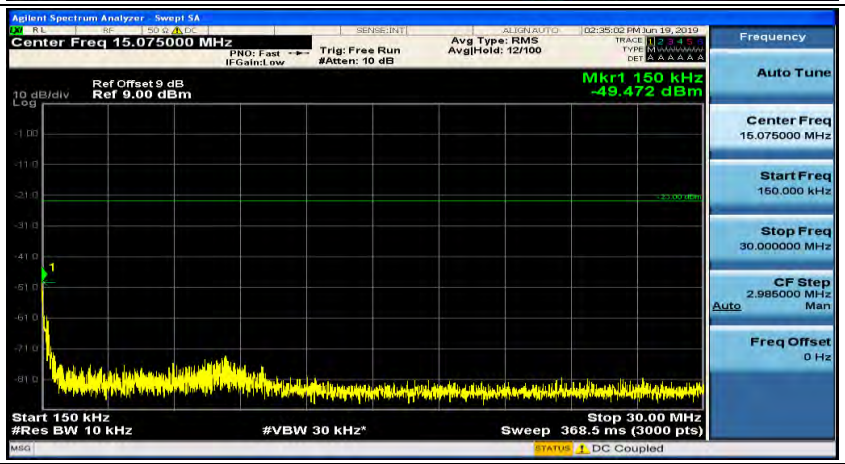


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#49

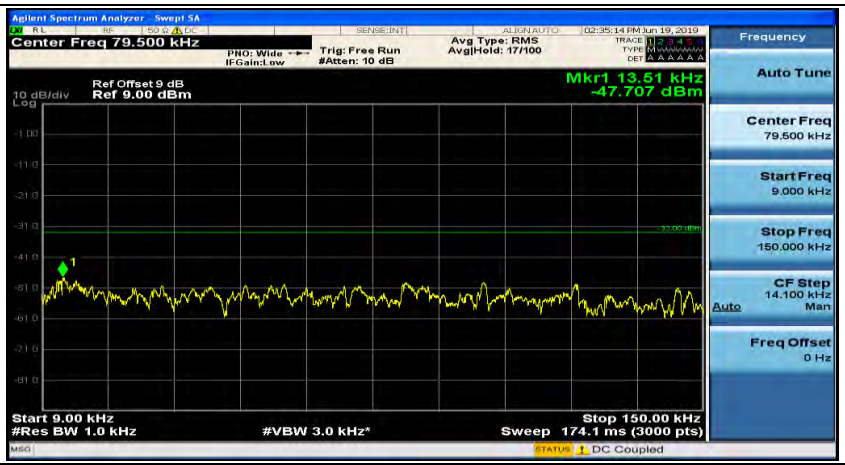

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:38:31 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 86.06 kHz
-49.196 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

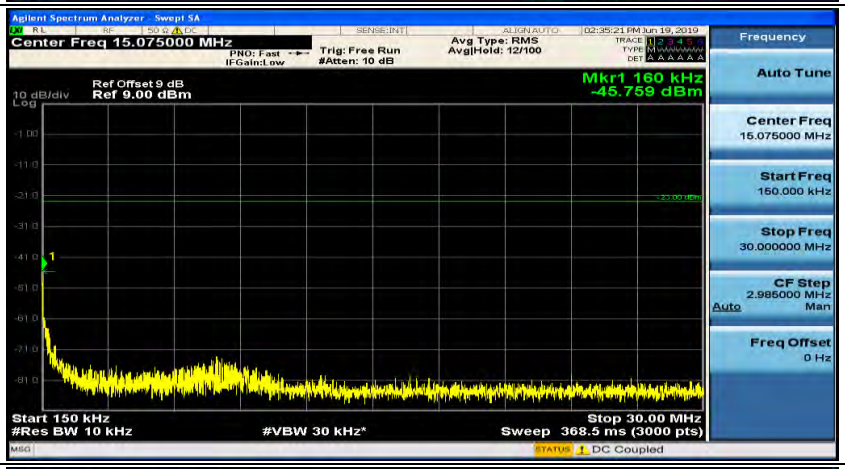

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:38:37 PM Jun 19, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-48.789 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:38:43 PM Jun 19, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.108 GHz
-26.246 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

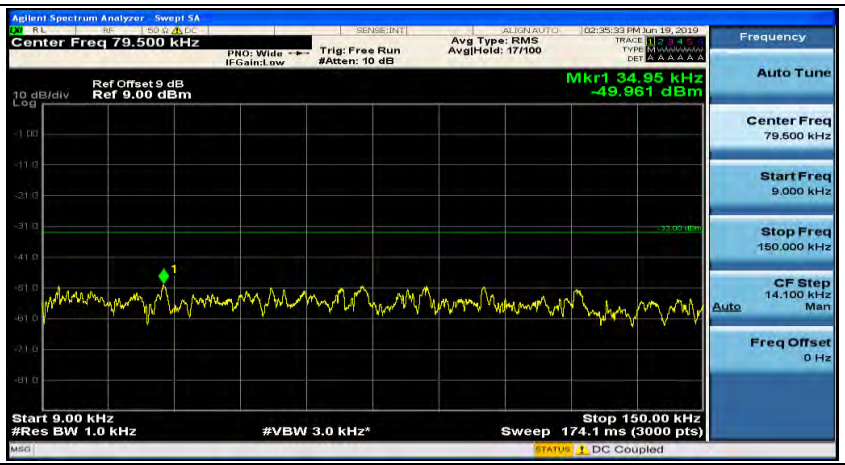
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



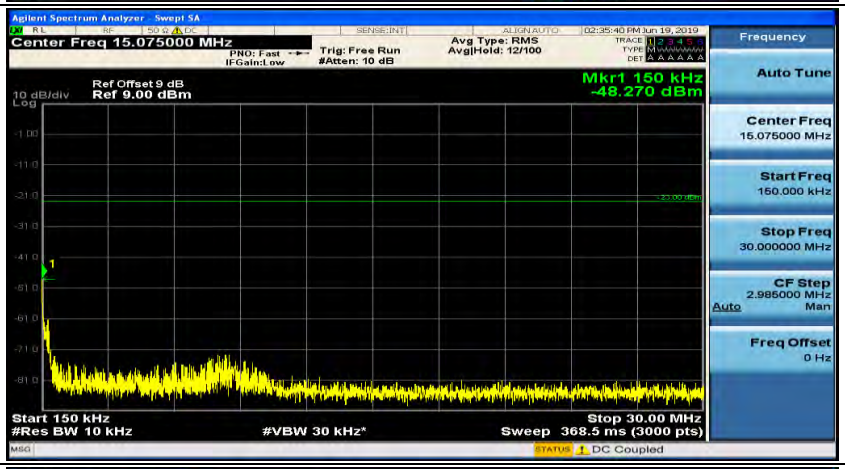
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24



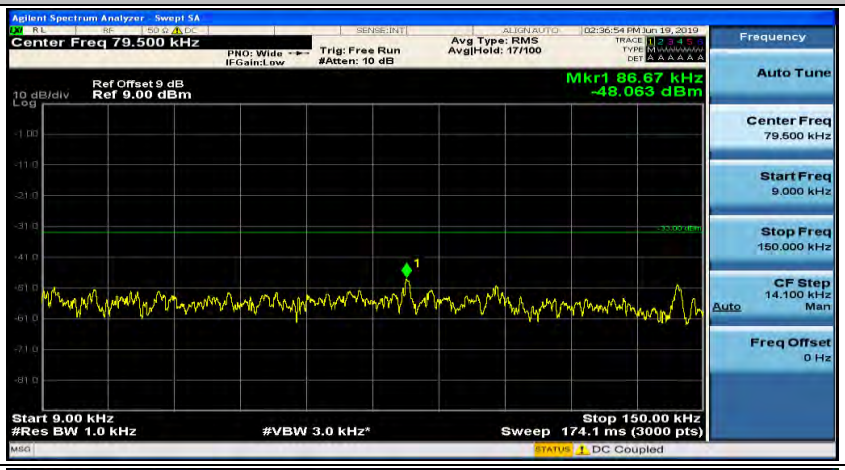
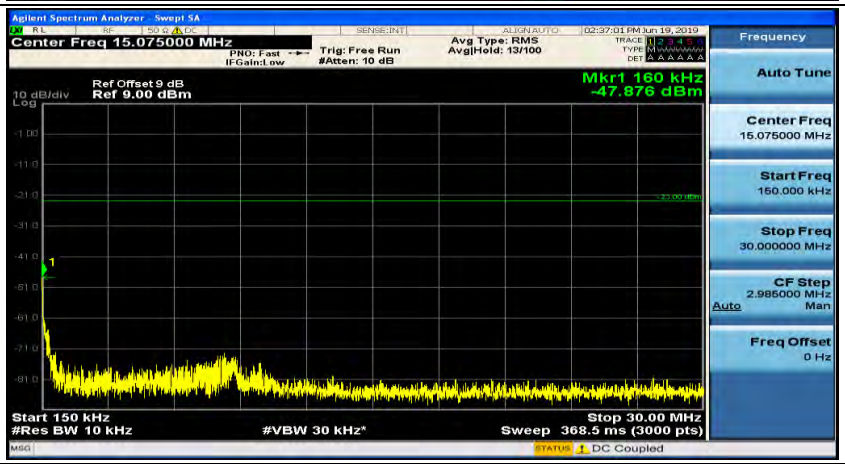
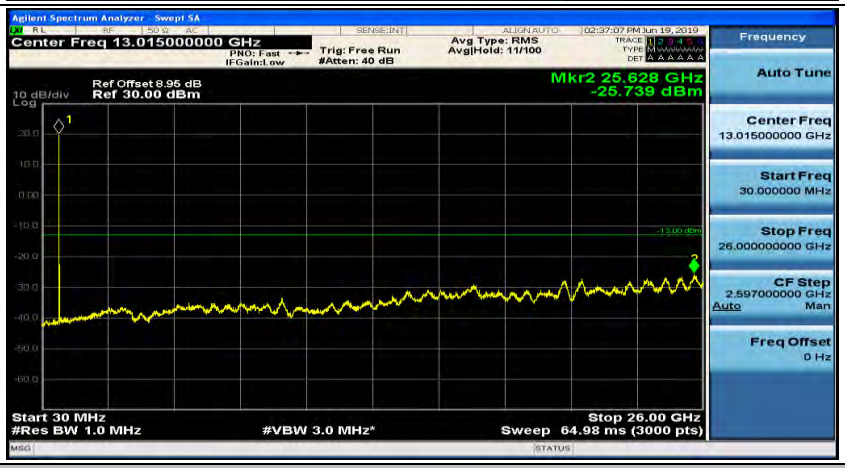


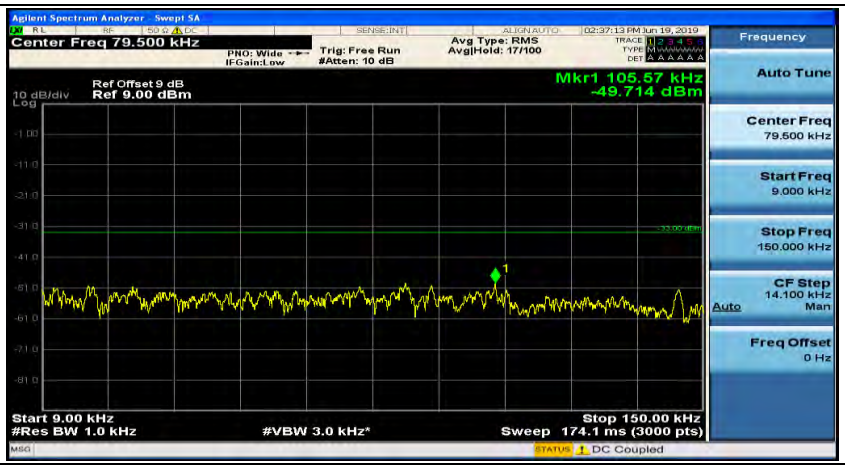
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#49

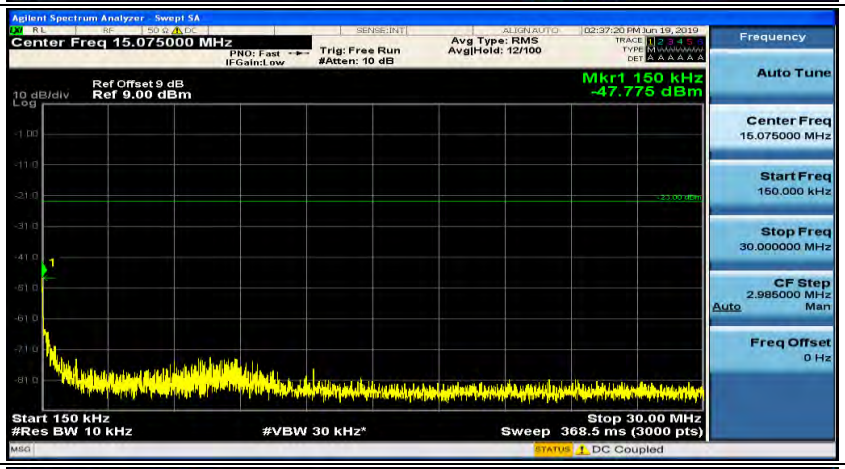

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:35:33 PM Jun 19, 2019
Frequency
Auto Tune
Mkr1 34.95 kHz
-49.961 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:35:40 PM Jun 19, 2019
Frequency
Auto Tune
Mkr1 150 kHz
-48.270 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled

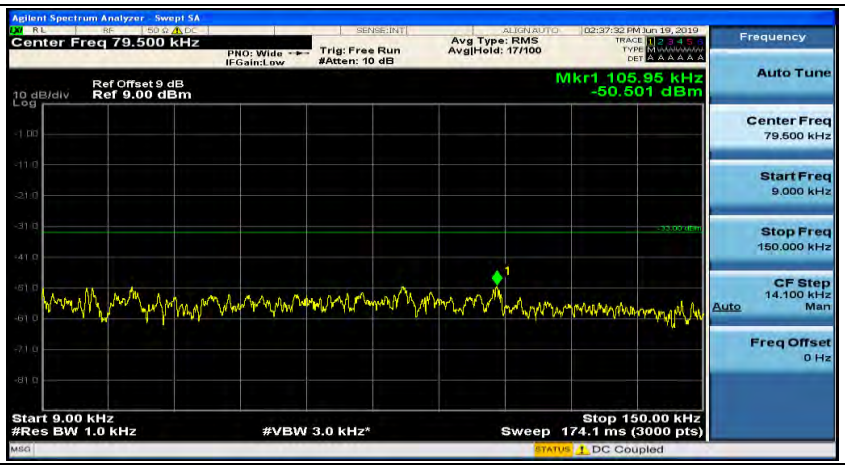

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:35:45 PM Jun 19, 2019
Frequency
Auto Tune
Mkr2 25.654 GHz
-25.843 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

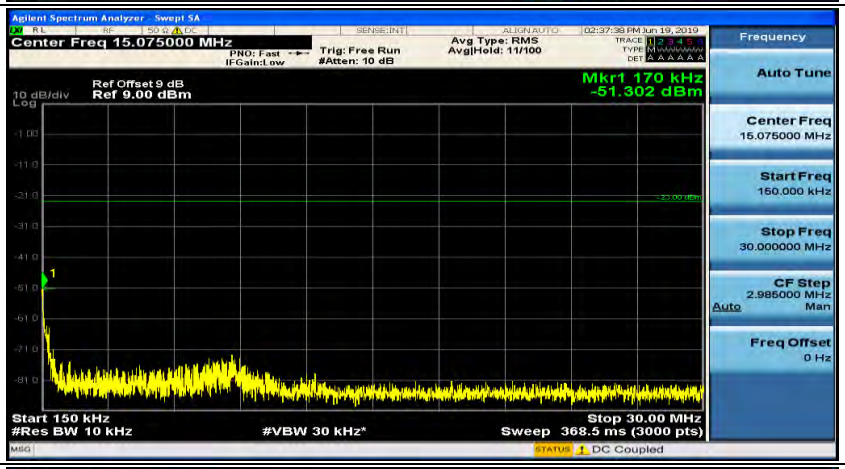
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24



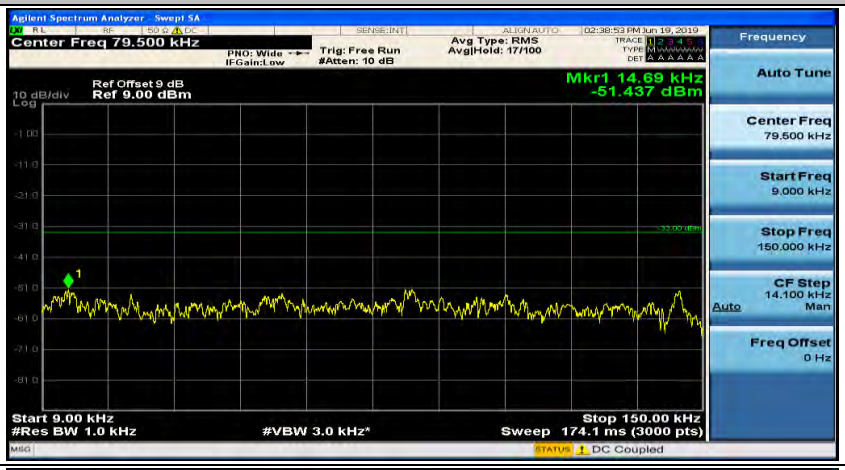
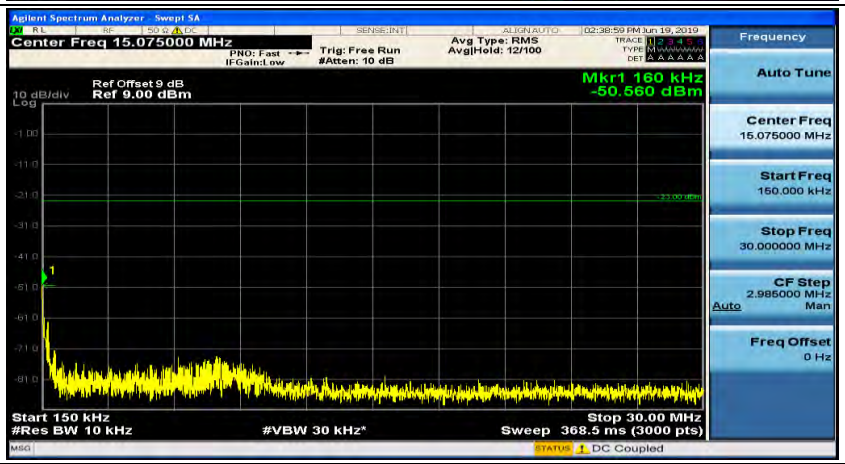


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49

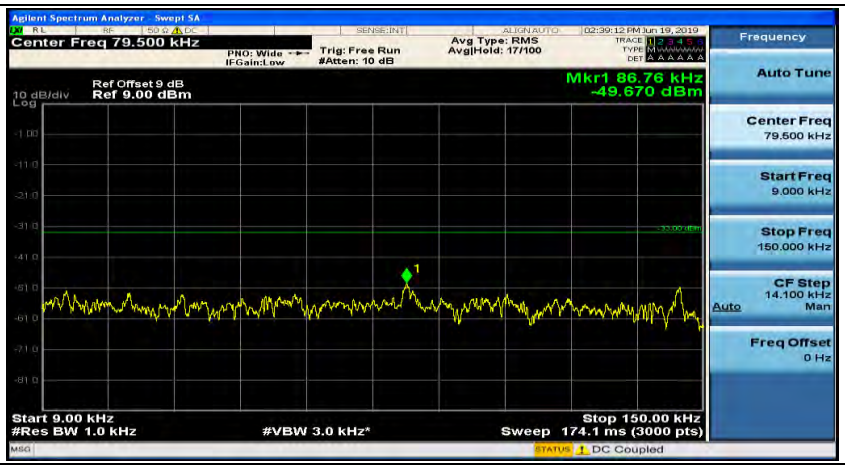

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:37:32 PM Jun 19, 2019
Frequency
Auto Tune
Mkr1 105.95 kHz
-50.501 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

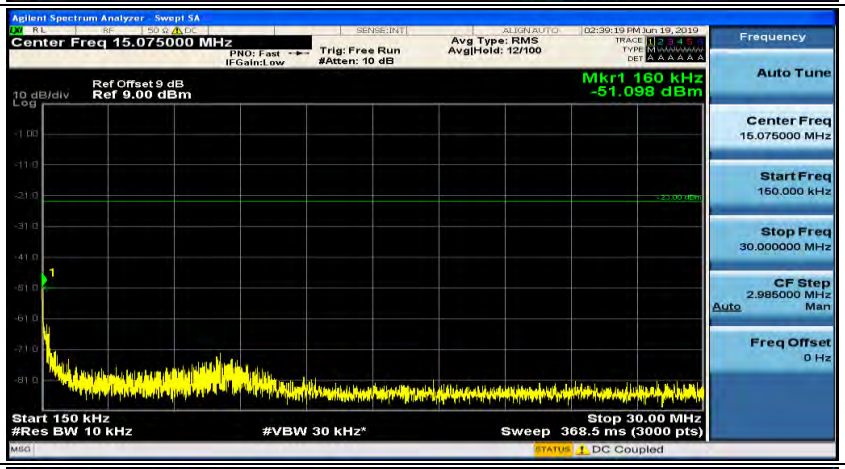

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
02:37:38 PM Jun 19, 2019
Frequency
Auto Tune
Mkr1 170 kHz
-51.302 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:37:44 PM Jun 19, 2019
Frequency
Auto Tune
Mkr2 25.688 GHz
-26.281 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

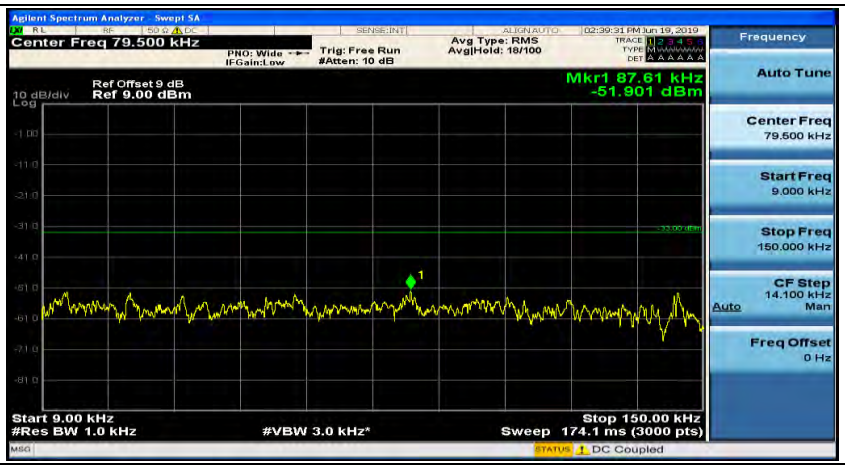
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



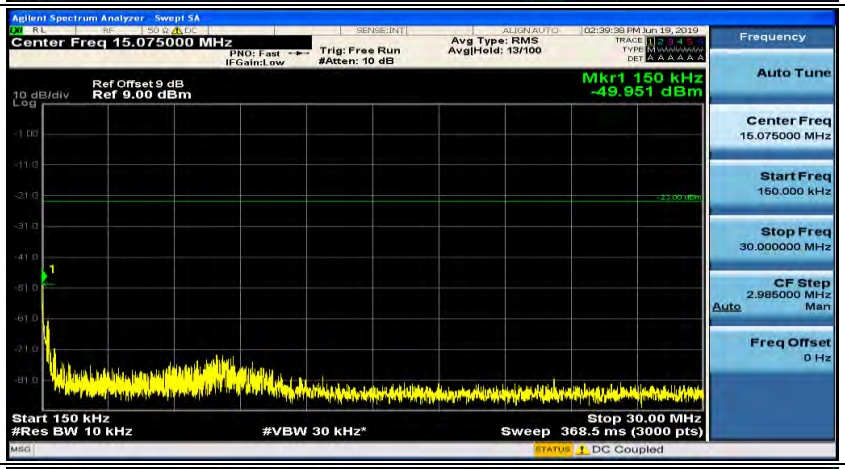
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24





Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49


Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 18/100
02:39:31 PM Jun 19, 2019
Frequency
Auto Tune
Mkr1 87.61 kHz
-51.901 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 13/100
02:39:38 PM Jun 19, 2019
Frequency
Auto Tune
Mkr1 150 kHz
-49.951 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:39:44 PM Jun 19, 2019
Frequency
Auto Tune
Mkr2 25.619 GHz
-26.383 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	3.99	0.005702	± 2.5	PASS
		VN	TN	2.93	0.004188	± 2.5	PASS
		VH	TN	1.16	0.001658	± 2.5	PASS
	MCH	VL	TN	3.32	0.004693	± 2.5	PASS
		VN	TN	4.23	0.005979	± 2.5	PASS
		VH	TN	-1.54	-0.002177	± 2.5	PASS
	HCH	VL	TN	0.84	0.001174	± 2.5	PASS
		VN	TN	2.3	0.003215	± 2.5	PASS
		VH	TN	1.76	0.002461	± 2.5	PASS
16QAM	LCH	VL	TN	1.1	0.001572	± 2.5	PASS
		VN	TN	0.64	0.000915	± 2.5	PASS
		VH	TN	-1.76	-0.002515	± 2.5	PASS
	MCH	VL	TN	-1.71	-0.002417	± 2.5	PASS
		VN	TN	1.78	0.002516	± 2.5	PASS
		VH	TN	-1.1	-0.001555	± 2.5	PASS
	HCH	VL	TN	0	0.000000	± 2.5	PASS
		VN	TN	-0.84	-0.001174	± 2.5	PASS
		VH	TN	-1.31	-0.001831	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.45	-0.002072	± 2.5	PASS
		VN	-20	-1.48	-0.002115	± 2.5	PASS
		VN	-10	0.49	0.000700	± 2.5	PASS
		VN	0	0.3	0.000429	± 2.5	PASS
		VN	10	2.04	0.002916	± 2.5	PASS
		VN	20	4.15	0.005931	± 2.5	PASS
		VN	30	1.48	0.002115	± 2.5	PASS
		VN	40	-0.52	-0.000743	± 2.5	PASS
		VN	50	1.09	0.001558	± 2.5	PASS
	MCH	VN	-30	0.64	0.000905	± 2.5	PASS
		VN	-20	1.84	0.002601	± 2.5	PASS

		VN	-10	-0.19	-0.000269	± 2.5	PASS
		VN	0	2.44	0.003449	± 2.5	PASS
		VN	10	-1.92	-0.002714	± 2.5	PASS
		VN	20	0.44	0.000622	± 2.5	PASS
		VN	30	-0.46	-0.000650	± 2.5	PASS
		VN	40	2.29	0.003237	± 2.5	PASS
		VN	50	1.22	0.001724	± 2.5	PASS
	HCH	VN	-30	0.31	0.000433	± 2.5	PASS
		VN	-20	0.9	0.001258	± 2.5	PASS
		VN	-10	-1.63	-0.002279	± 2.5	PASS
		VN	0	3.62	0.005061	± 2.5	PASS
		VN	10	2.39	0.003341	± 2.5	PASS
		VN	20	0.79	0.001104	± 2.5	PASS
		VN	30	1.21	0.001692	± 2.5	PASS
		VN	40	3.88	0.005424	± 2.5	PASS
		VN	50	-1.31	-0.001831	± 2.5	PASS
16QAM	LCH	VN	-30	2.67	0.003816	± 2.5	PASS
		VN	-20	0.95	0.001358	± 2.5	PASS
		VN	-10	0.71	0.001015	± 2.5	PASS
		VN	0	-0.05	-0.000071	± 2.5	PASS
		VN	10	-1.64	-0.002344	± 2.5	PASS
		VN	20	0.26	0.000372	± 2.5	PASS
		VN	30	0	0.000000	± 2.5	PASS
		VN	40	-0.99	-0.001415	± 2.5	PASS
		VN	50	4.08	0.005831	± 2.5	PASS
	MCH	VN	-30	-0.01	-0.000014	± 2.5	PASS
		VN	-20	-1.87	-0.002643	± 2.5	PASS
		VN	-10	2.75	0.003887	± 2.5	PASS
		VN	0	3.25	0.004594	± 2.5	PASS
		VN	10	-0.07	-0.000099	± 2.5	PASS
		VN	20	3.11	0.004396	± 2.5	PASS
		VN	30	-1.04	-0.001470	± 2.5	PASS
		VN	40	2.55	0.003604	± 2.5	PASS
		VN	50	1.9	0.002686	± 2.5	PASS
	HCH	VN	-30	3.54	0.004949	± 2.5	PASS
		VN	-20	0.47	0.000657	± 2.5	PASS
		VN	-10	1.99	0.002782	± 2.5	PASS
		VN	0	2.25	0.003146	± 2.5	PASS
		VN	10	1.06	0.001482	± 2.5	PASS
		VN	20	-1.8	-0.002516	± 2.5	PASS
		VN	30	-0.52	-0.000727	± 2.5	PASS

		VN	40	-0.68	-0.000951	± 2.5	PASS
		VN	50	0.19	0.000266	± 2.5	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz+							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-0.37	-0.000528	± 2.5	PASS
		VN	TN	3.26	0.004654	± 2.5	PASS
		VH	TN	4.07	0.005810	± 2.5	PASS
	MCH	VL	TN	3.5	0.004947	± 2.5	PASS
		VN	TN	0.12	0.000170	± 2.5	PASS
		VH	TN	4.02	0.005682	± 2.5	PASS
	HCH	VL	TN	0.71	0.000994	± 2.5	PASS
		VN	TN	1.67	0.002337	± 2.5	PASS
		VH	TN	4.24	0.005934	± 2.5	PASS
16QAM	LCH	VL	TN	0.89	0.001271	± 2.5	PASS
		VN	TN	4.71	0.006724	± 2.5	PASS
		VH	TN	1.71	0.002441	± 2.5	PASS
	MCH	VL	TN	-0.55	-0.000777	± 2.5	PASS
		VN	TN	1.76	0.002488	± 2.5	PASS
		VH	TN	1.53	0.002163	± 2.5	PASS
	HCH	VL	TN	4.63	0.006480	± 2.5	PASS
		VN	TN	3.22	0.004507	± 2.5	PASS
		VH	TN	0.43	0.000602	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.9	0.001285	± 2.5	PASS
		VN	-20	-0.97	-0.001385	± 2.5	PASS
		VN	-10	3.98	0.005682	± 2.5	PASS
		VN	0	2.6	0.003712	± 2.5	PASS
		VN	10	-0.48	-0.000685	± 2.5	PASS
		VN	20	-1.96	-0.002798	± 2.5	PASS
		VN	30	0.15	0.000214	± 2.5	PASS
		VN	40	2.28	0.003255	± 2.5	PASS
		VN	50	3.68	0.005253	± 2.5	PASS
	MCH	VN	-30	4.22	0.005965	± 2.5	PASS
		VN	-20	3.77	0.005329	± 2.5	PASS
		VN	-10	1.53	0.002163	± 2.5	PASS

		VN	0	3.29	0.004650	± 2.5	PASS
		VN	10	2.73	0.003859	± 2.5	PASS
		VN	20	1.91	0.002700	± 2.5	PASS
		VN	30	4.69	0.006629	± 2.5	PASS
		VN	40	-1.07	-0.001512	± 2.5	PASS
		VN	50	4.5	0.006360	± 2.5	PASS
	HCH	VN	-30	4.8	0.006718	± 2.5	PASS
		VN	-20	0.7	0.000980	± 2.5	PASS
		VN	-10	-1.92	-0.002687	± 2.5	PASS
		VN	0	3.35	0.004689	± 2.5	PASS
		VN	10	1.16	0.001624	± 2.5	PASS
		VN	20	0.2	0.000280	± 2.5	PASS
		VN	30	-1.04	-0.001456	± 2.5	PASS
		VN	40	-0.2	-0.000280	± 2.5	PASS
		VN	50	4.31	0.006032	± 2.5	PASS
QPSK	LCH	VN	-30	3.86	0.005510	± 2.5	PASS
		VN	-20	-0.48	-0.000685	± 2.5	PASS
		VN	-10	4.57	0.006524	± 2.5	PASS
		VN	0	2.14	0.003055	± 2.5	PASS
		VN	10	0.83	0.001185	± 2.5	PASS
		VN	20	3.17	0.004525	± 2.5	PASS
		VN	30	1.3	0.001856	± 2.5	PASS
		VN	40	3.79	0.005410	± 2.5	PASS
		VN	50	2.59	0.003697	± 2.5	PASS
	MCH	VN	-30	0.86	0.001216	± 2.5	PASS
		VN	-20	0.55	0.000777	± 2.5	PASS
		VN	-10	0	0.000000	± 2.5	PASS
		VN	0	-0.36	-0.000509	± 2.5	PASS
		VN	10	0.64	0.000905	± 2.5	PASS
		VN	20	4.68	0.006615	± 2.5	PASS
		VN	30	0.78	0.001102	± 2.5	PASS
		VN	40	-0.33	-0.000466	± 2.5	PASS
		VN	50	0.67	0.000947	± 2.5	PASS
	HCH	VN	-30	3.11	0.004353	± 2.5	PASS
		VN	-20	1.12	0.001568	± 2.5	PASS
		VN	-10	-0.95	-0.001330	± 2.5	PASS
		VN	0	4.47	0.006256	± 2.5	PASS
		VN	10	2.59	0.003625	± 2.5	PASS
		VN	20	-1.76	-0.002463	± 2.5	PASS
		VN	30	-0.97	-0.001358	± 2.5	PASS
		VN	40	0.81	0.001134	± 2.5	PASS

		VN	50	-0.77	-0.001078	± 2.5	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	2.25	0.003207	± 2.5	PASS
		VN	TN	0.68	0.000969	± 2.5	PASS
		VH	TN	1.77	0.002523	± 2.5	PASS
	MCH	VL	TN	-0.96	-0.001357	± 2.5	PASS
		VN	TN	-1.21	-0.001710	± 2.5	PASS
		VH	TN	0.76	0.001074	± 2.5	PASS
	HCH	VL	TN	1.47	0.002060	± 2.5	PASS
		VN	TN	1.84	0.002579	± 2.5	PASS
		VH	TN	-1.16	-0.001626	± 2.5	PASS
16QAM	LCH	VL	TN	0.35	0.000499	± 2.5	PASS
		VN	TN	-1.32	-0.001882	± 2.5	PASS
		VH	TN	0.54	0.000770	± 2.5	PASS
	MCH	VL	TN	4.81	0.006799	± 2.5	PASS
		VN	TN	-0.63	-0.000890	± 2.5	PASS
		VH	TN	3.87	0.005470	± 2.5	PASS
	HCH	VL	TN	3.52	0.004933	± 2.5	PASS
		VN	TN	3.75	0.005256	± 2.5	PASS
		VH	TN	3.14	0.004401	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.25	-0.000356	± 2.5	PASS
		VN	-20	4.45	0.006344	± 2.5	PASS
		VN	-10	3.35	0.004775	± 2.5	PASS
		VN	0	4.14	0.005902	± 2.5	PASS
		VN	10	0.51	0.000727	± 2.5	PASS
		VN	20	4.95	0.007056	± 2.5	PASS
		VN	30	4.71	0.006714	± 2.5	PASS
		VN	40	-0.4	-0.000570	± 2.5	PASS
		VN	50	-1.77	-0.002523	± 2.5	PASS
	MCH	VN	-30	1.79	0.002530	± 2.5	PASS
		VN	-20	-1.26	-0.001781	± 2.5	PASS
		VN	-10	-0.66	-0.000933	± 2.5	PASS
		VN	0	-0.45	-0.000636	± 2.5	PASS

		VN	10	1.9	0.002686	± 2.5	PASS
		VN	20	0.52	0.000735	± 2.5	PASS
		VN	30	3.97	0.005611	± 2.5	PASS
		VN	40	-1.95	-0.002756	± 2.5	PASS
		VN	50	-1.57	-0.002219	± 2.5	PASS
	HCH	VN	-30	-1.2	-0.001682	± 2.5	PASS
		VN	-20	3.09	0.004331	± 2.5	PASS
		VN	-10	4.47	0.006265	± 2.5	PASS
		VN	0	-1.53	-0.002144	± 2.5	PASS
		VN	10	3.54	0.004961	± 2.5	PASS
		VN	20	-1.56	-0.002186	± 2.5	PASS
		VN	30	0.43	0.000603	± 2.5	PASS
		VN	40	3.15	0.004415	± 2.5	PASS
		VN	50	0.38	0.000533	± 2.5	PASS
16QAM	LCH	VN	-30	-1.51	-0.002153	± 2.5	PASS
		VN	-20	2.92	0.004163	± 2.5	PASS
		VN	-10	-1.51	-0.002153	± 2.5	PASS
		VN	0	3.28	0.004676	± 2.5	PASS
		VN	10	0.77	0.001098	± 2.5	PASS
		VN	20	-0.91	-0.001297	± 2.5	PASS
		VN	30	0.39	0.000556	± 2.5	PASS
		VN	40	1.72	0.002452	± 2.5	PASS
		VN	50	4.79	0.006828	± 2.5	PASS
	MCH	VN	-30	-1.51	-0.002134	± 2.5	PASS
		VN	-20	-0.45	-0.000636	± 2.5	PASS
		VN	-10	-0.62	-0.000876	± 2.5	PASS
		VN	0	-1.42	-0.002007	± 2.5	PASS
		VN	10	1.34	0.001894	± 2.5	PASS
		VN	20	-0.08	-0.000113	± 2.5	PASS
		VN	30	1.12	0.001583	± 2.5	PASS
		VN	40	4.94	0.006982	± 2.5	PASS
		VN	50	3.37	0.004763	± 2.5	PASS
	HCH	VN	-30	4.37	0.006125	± 2.5	PASS
		VN	-20	-0.49	-0.000687	± 2.5	PASS
		VN	-10	1.09	0.001528	± 2.5	PASS
		VN	0	-0.18	-0.000252	± 2.5	PASS
		VN	10	-1.75	-0.002453	± 2.5	PASS
		VN	20	2.1	0.002943	± 2.5	PASS
		VN	30	0.7	0.000981	± 2.5	PASS
		VN	40	2.36	0.003308	± 2.5	PASS
		VN	50	-0.68	-0.000953	± 2.5	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	0.4	0.000568	± 2.5	PASS
		VN	TN	1.48	0.002102	± 2.5	PASS
		VH	TN	-0.75	-0.001065	± 2.5	PASS
	MCH	VL	TN	-1.08	-0.001527	± 2.5	PASS
		VN	TN	-0.89	-0.001258	± 2.5	PASS
		VH	TN	1.14	0.001611	± 2.5	PASS
	HCH	VL	TN	-1.69	-0.002377	± 2.5	PASS
		VN	TN	2.21	0.003108	± 2.5	PASS
		VH	TN	1.72	0.002419	± 2.5	PASS
16QAM	LCH	VL	TN	3.75	0.005327	± 2.5	PASS
		VN	TN	-1.24	-0.001761	± 2.5	PASS
		VH	TN	-0.97	-0.001378	± 2.5	PASS
	MCH	VL	TN	0.05	0.000071	± 2.5	PASS
		VN	TN	-0.41	-0.000580	± 2.5	PASS
		VH	TN	-1.79	-0.002530	± 2.5	PASS
	HCH	VL	TN	3.67	0.005162	± 2.5	PASS
		VN	TN	-0.15	-0.000211	± 2.5	PASS
		VH	TN	3.07	0.004318	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	2.82	0.004006	± 2.5	PASS
		VN	-20	-1.24	-0.001761	± 2.5	PASS
		VN	-10	4.44	0.006307	± 2.5	PASS
		VN	0	2.95	0.004190	± 2.5	PASS
		VN	10	3.27	0.004645	± 2.5	PASS
		VN	20	3.08	0.004375	± 2.5	PASS
		VN	30	4.44	0.006307	± 2.5	PASS
		VN	40	-0.86	-0.001222	± 2.5	PASS
		VN	50	0.97	0.001378	± 2.5	PASS
	MCH	VN	-30	2.47	0.003491	± 2.5	PASS
		VN	-20	-1.9	-0.002686	± 2.5	PASS
		VN	-10	0.77	0.001088	± 2.5	PASS
		VN	0	-1.85	-0.002615	± 2.5	PASS
		VN	10	2.57	0.003633	± 2.5	PASS
		VN	20	2.53	0.003576	± 2.5	PASS

		VN	30	0.48	0.000678	± 2.5	PASS
		VN	40	-1.1	-0.001555	± 2.5	PASS
		VN	50	-1.82	-0.002572	± 2.5	PASS
	HCH	VN	-30	-1.98	-0.002785	± 2.5	PASS
		VN	-20	0.69	0.000970	± 2.5	PASS
		VN	-10	3.18	0.004473	± 2.5	PASS
		VN	0	-0.37	-0.000520	± 2.5	PASS
		VN	10	4.01	0.005640	± 2.5	PASS
		VN	20	4.73	0.006653	± 2.5	PASS
		VN	30	2.13	0.002996	± 2.5	PASS
		VN	40	0.64	0.000900	± 2.5	PASS
		VN	50	-0.54	-0.000759	± 2.5	PASS
QPSK	LCH	VN	-30	4.01	0.005696	± 2.5	PASS
		VN	-20	-1.89	-0.002685	± 2.5	PASS
		VN	-10	-0.74	-0.001051	± 2.5	PASS
		VN	0	4.72	0.006705	± 2.5	PASS
		VN	10	1.78	0.002528	± 2.5	PASS
		VN	20	4.39	0.006236	± 2.5	PASS
		VN	30	2.22	0.003153	± 2.5	PASS
		VN	40	-0.17	-0.000241	± 2.5	PASS
		VN	50	2.07	0.002940	± 2.5	PASS
	MCH	VN	-30	4.64	0.006558	± 2.5	PASS
		VN	-20	-1.47	-0.002078	± 2.5	PASS
		VN	-10	-0.5	-0.000707	± 2.5	PASS
		VN	0	3.25	0.004594	± 2.5	PASS
		VN	10	1.64	0.002318	± 2.5	PASS
		VN	20	2.84	0.004014	± 2.5	PASS
		VN	30	1.15	0.001625	± 2.5	PASS
		VN	40	1.4	0.001979	± 2.5	PASS
		VN	50	-1.16	-0.001640	± 2.5	PASS
	HCH	VN	-30	0.54	0.000759	± 2.5	PASS
		VN	-20	-0.39	-0.000549	± 2.5	PASS
		VN	-10	3.82	0.005373	± 2.5	PASS
		VN	0	2.31	0.003249	± 2.5	PASS
		VN	10	0.02	0.000028	± 2.5	PASS
		VN	20	1.72	0.002419	± 2.5	PASS
		VN	30	0.49	0.000689	± 2.5	PASS
		VN	40	2.11	0.002968	± 2.5	PASS
		VN	50	0.48	0.000675	± 2.5	PASS